"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

ACCESSION NR: AP4009629

trace the evolution of blocs limited by a system of global depth fractures extending in four directions for thousands of kilometers: meridional, submeridional, latitudinal, and sublatitudinal. The geophysical significance of these fractures (breaks) is discussed, and the most ancient systems are traced in detail. The author states that approximately 100-150 million years ago the Moon had to a large degree inherited its ancient structural plan; the central meridional zone of fractures of the southern hemisphere was the most mobile, while the far side was fairly stable. In succeeding periods a further differentiation of structural elements along the depth fault zones created the present enormous blocs. A demonstration of this hypothesis is given. The author cites the evidence of A. V. Peyve ("Struktura zemnoy kory i deformatsii gornykh porod," Izd-vo AN SSSR, 1960, 67) and G. N. Katterfel'd (Izv. Vses. geogr. o-va, v. 91, no. 272, 1952) on the existence of a bloc structure on the Earth and Mars as reason for investigating the possibility of a general law operative in the development of a hard core in these bodies. "The author wishes to express his gratitude to Doctor of Physics and Mathematics A. G. Masevich for her help in conducting the studies." Original article has: 2 figures.

Card 2/2

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

KHODAK, Yu.A.

Principal structural elements of the moon and the geographical and geological methods of studying them. Izv. Kom. po fiz. plan. no.4:10-23 Ag '63. (MIRA 18:5)

1. Laboratoriya osadochnykh poleznykh iskopayemykh Gosudarstvennogo geologicheskogo komiteta SSSR.

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

KHODAK, Yu.A.

Geological of the Lesser Khingan Mountains and its position in the structure of the Far East. Sov. geol. 6 no.6:20-31 Je '63.
(MIRA 16:7)

1. Laboratoriya osadochnykh poleznykh iskopayemykh AN SSSR.
(Khingan Mountains—Geology, Structural)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

KHODAK, Yu.A.

Main structural elements of the moon and the importance of geographical and geological methods in lunar explorations. Izv. AN SSSR.Ser. geol. 28 no.8:11-22 Ag '63. (MIRA 17:2)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

KHODAK, Yu.A.; CHEBOTAREV, M.V.

Ancient formations in the Amur Valley. Sov. geol. 7 no.1: 79-94 Ja '64. (MIRA 17:6)

1. Dal'nevostochnoye geologicheskoye upravleniye i Laboratoriya osadochnykh poleznykh iskopayemykh Gosudarstvennogo geologicheskogo komiteta SSSR.

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

KHODAK, Yu.A.

Structural and genetic characteristics of the iron-manganese mineralization of the Karazhal type (central Kazakhstan). Trudy SNIIGGIMS no.35:218-227 '64. (MIRA 18:5)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

YEROSHCHEV-SHAK, V.A.; KHODAK, Yu.A.; GRIBOV, Ye.M.; SYNGAYEVSKIY, Ye.D.

Association of clay minerals in the Upper Famennian rocks and ores of the Dahail'ma trough. Dokl. AN SSSR 164 no.4:906-909 O '65. (MIRA 18:10)

1. Laboratoriya osadochnykh poleznykh iskopayemykh AN SSSR. Submitted May 12, 1965.

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

ACC NR. AR6035075 SOURCE CODE: UR/0169/66/000/008/G001/G001

AUTHOR: Khodak, Yu. A.

TITLE: Defining the main features of the structure and development of the Moon and their significance in the elucidation of principles of geological phenomena

SOURCE: Ref. zh. Geofizika, Abs. 8G1

REF SOURCE: Sb. Materialy k Soveshchaniyu Obshchiye zakonomern. geol. yavleniy, 1966, Vyp. 1. L., 1965, 197-202

TOPIC TAGS: moon, geology, selenography, earth, planet, map

ABSTRACT: In order to find the basic magnetic and block structure of the Earth, it is necessary to find the principles of the distribution of lunar ring structures and their connection with large and local blocks. The basic problem in the study of the structure of the Moon is the development of the stratigraphic scale of its formations. A structural-selenological map of the visible part of the Moon at a scale of 1:2,500,000 was compiled. Four structural strata are seen on the map. The areas of an emerging, mechanically eroded, ancient basement were noted. The

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"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

ACC NR: AR6035075

study of the structure of the planetary body of the moon will help to determine the general planetary structure of the Earth as a planet. [Translation of abstract]

SUB CODE: 03, 08/

Card 2/2

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

KHODAK, Yu.S.; SUN' SHU [Sun Shu]

Stratigraphy of Upper Paleozoic sediments in the northeastern part of China and adjacent territories of the southern part of the Soviet Far East. Biul. MOIP. Otd.geol. 38 no.2:56-73 Ja-F '63. (MIRA 16:5)

(China--Geology, Stratigraphic)
(Soviet Far East--Geology, Stratigraphic)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

KHODAKIN, N. I.

Soshnikova, M. N. and N. I. Khodakin "The Aetiological Agent of a Peculiar Form of "ncephalitis," Dok. AN, 47, No. 5, 1945. Mbr., Uzbek Inst. Microbiology & Epidemiology, Tashkent, -1944-049-.

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

KHODAKOV, A.

A transformerless rectifier. Radio no.2:35 F '63. (MIRA 16:2)
(Electric current rectifiers)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

S/196/63/000/001/006/035
E193/E383

AUTHORS: Protsenko, P.I., Khodakov, A.A., Mirskaya, Ye.Z. and Venerovskaya, L.N.

TITLE: Physicochemical parameters of nitrites and nitrates of alkali and alkaline-earth metals with ferroelectric properties

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no. 1, 1963, 17, abstract 1 B55. (In collection: Segnetoelektriki (Ferroelectrics), Rostov-na-Donu, Rostovsk. un-t, 1961, 21-26)

TEXT: In connection with the possible application of ferroelectrics as nonlinear elements in conjunction with electroluminophors, it is desirable to have available ferroelectrics characterized by low ε, this property being necessary to ensure their compatibility with electroluminophors. With this in view, a study was conducted of crystals of those nitrites and nitrates of alkali and alkaline-earth metals that possess ferroelectric properties; the experimental specimens were crystallized out of aqueous solutions or grown by the Bridgman method from their melts. Thermal

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analysis of a large number of nitrates and nitrites enabled the authors to obtain more accurate data on their melting points, to establish the existence of polymorphic transformations and to determine the transformation temperatures (these data being reported in the form of a table). It was shown that single crystals of sodium nitrite ($NaNO_2$) in the direction of the b axis consituted ferroelectrics with $\Theta \sim 437$ °K, i.e. 164 °C (see Fig. 1), the magnitude of ε at Θ being more than 100 times higher than that at room temperature. The magnitude of spontaneous polarization, determined by pyroelectrical measurements, was found to be about 7 μk/cm. Typical hysteresis loops were observed at 413 °K (140 °C) at 50 c.p.s. High values of coercive fields at room temperature were established. A study of the dependence of ε of $NaNO_2$ on temperature and the intensity of the DC field E showed that ε decreased with increasing E at temperatures lower than Θ, being independent of E at Θ. Dilatometric measurements showed that the temperature coefficient of linear expansion α of $NaNO_2$ was of the order of $10^{-4} - 4 \times 10^{-5}$ deg^{-1}, and that the temperature-dependence of α differed from that typical for ferroelectrics. A

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domain structure was observed which disappeared at temperatures higher than θ and was not restored on cooling below θ. Single crystals of sodium, rubidium, caesium and thallium nitrates had phase-transformations in the temperature range between room temperature and the melting point. The transformation of sodium nitrate from the second phase (with an orthorhombic structure of aragonite) to the first phase (with the calcite structure) took place on heating above 403 °K (130 °C); on cooling below 397 °K (124 °C) the first phase changed into ferroelectric third phase, which remained stable down to 383 °K (110 °C) and then changed to the second phase. The transformation of sodium nitrate to its ferroelectric phase was accompanied by a decrease in ε. Transformation from hexagonal to cubic modification took place at 434 °K (161 °C) in rubidium nitrate, a change from cubic to rhombic modification taking place at 492 °K (219 °C); a phase-transformation in this compound was observed also at 564 °K (291 °C). Rubidium nitrate had no ferroelectric properties in the temperature interval studied. A phase-transformation took place in caesium nitrate at 427 °K (154 °C) but no maxima were observed near the transformation temperature. Two phase-transformations were observed in thallium nitrate (see

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Physicochemical parameters ....

Fig. 2): $\gamma \rightarrow \beta$ transformation at 348 °K (75 °C) and $\beta \rightarrow \alpha$ transformation at 418 °K (145 °C). The increase in ε observed on heating thallium nitrate was attributed to the increase in conductivity. No ferroelectric properties were observed in barium nitrate, a $(Tl\text{-}Ba)NO_2$ complex and certain other nitrates. There are 5 figures and 3 references.

[Abstracter's note: Complete translation.]

CAPTION to Fig.1:

Temperature-dependence of ε and tan δ of $NaNO_2$ at f = 1 Mc/s

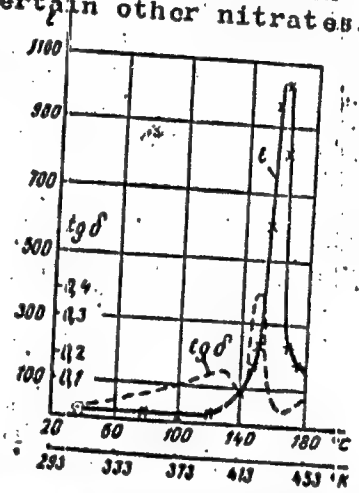

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Fig. 1:

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"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

S/019/61/000/024/031/088
A156/A126

AUTHORS: Sholokhovich, M.L.; Khodakov, A.L.

TITLE: Seignettoelectric monocrystals

PERIODICAL: Byulleten' izobreteniy, no. 24, 1961, 30

TEXT: Class 21g, 11_{02}. No. 143477 (688328/26 of December 3, 1960). Seignettoelectric monocrystals based on barium titanate, the distinctive feature of which consists in that for the purpose of increasing the nonlinearity of their characteristics and raising the rectangularity of their hysteresis loop, 1 - 2% barium hafnate is added to the barium titanate.

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L 15629-65 EWT(1)/EPA(s)-2/EWT(m)/EEC(t)/EWP(t)/EEC(b)-2/EWP(b) Pt-10/Pt-4
ASD-3/AFFTC/ESD-3/SSD/IJP(c) JD/GG
ACCESSION NR: AR3010273 S/0081/63/000/012/0071/0071

SOURCE: RZh. Khimiya, Abs. 12B466

AUTHOR: Kramarov, O. P.; Khodakov, A. L.; Sholokhovich, M. L.; Fesenko, Ye. G.

TITLE: Monocrystals of solid solutions of strontium and lead titanates

CITED SOURCE: Sb. Segnetoelektriki. Rostov-na-Donu, Rostovsk, un-t, 1961, 5-11

TOPIC TAGS: solid solution, strontium, lead, strontium titanate, lead titanate, monocrystalline structure

TRANSLATION: The fusion diagram for the system K_2F_2--$PbTiO_3$--$SrTiO_3$ has been studied and the formation of a continuous series of solid solutions $(Pb--Sr)TiO_3$ has been established. For determining the position of the Curie point in compounds with high electric conductivity, a specially constructed dilatometer was used permitted measurement of elongation in samples of 1-2 mm.

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L 15629-65
ACCESSION NR: AR3010278

transition temperature of 512° for monocrystals of $PbTiO_3$ was determined by the same method. The Curie point for monocrystals of [illegible] solutions is close to the data known for polycrystals. The refractive index for monocrystals [illegible] monochromatic radiation within the limits [illegible] for [illegible].

SUB CODE: MM, SS ENCL: 00

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"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

ACCESSION NR: AR4042161 S/0196/64/000/005/B019/B019

SOURCE: Ref. zh. Elektrotekhnika i energetika, Abs. 5B83

AUTHOR: Lezgintseva, T. N.; Khodakov, A. L.

TITLE: Influence of slight impurities of iron on the dielectric properties of solid solutions of barium titanate and stannate

CITED SOURCE: Izv. Leningr. elektrotekhn. in-ta, vy*p. 51, 1963, 260-267

TOPIC TAGS: barium titanate, barium stannate, dielectic property solid solution

TRANSLATION: The dependence of ε on the intensity of a variable electric field $E_{\sim}$ (up to 10 kv/cm), reversible ε ($E_{\sim}$ varied up to 8 kv/cm) was studied at 300 kc, hysteresis loop and dependence on temperature of ε and tanδ at 300 kc from 20 to 140°C for ceramic solid solutions of $BaTiO_3$ - $BaSnO_3$ with 0; 3; 6; 9 and 12 mole % $BaSnO_3$ and 0; 0.1; 0.2; 0.4; 0.7; 1 mole % Fe_2O_3. Introduction of additions of Fe_2O_3 leads to a sharp lowering of the nonlinear properties of solid solutions; this is

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ACCESSION NR: AR4042161

especially noticeably for compositions containing 6 mole % $BaSnO_3$. In solid solutions with additions of iron, θ shifts in the direction of low temperatures, the more noticeably, the higher the concentration of Fe, while ϵ is also lowered at θ. These effects are more noticeable in solid solutions baked directly from a mixture of $BaTiO_3$, $BaSnO_3$, and Fe_2O_3. The influence of Fe impurities on θ and ϵ in pure samples of $BaTiO_3$ is noticeably less than in solid solutions alloyed with the same concentration of Fe. For the manufacture of ferroelectric-ceramics and single crystals with the sharpest expressed nonlinear properties, it is proposed, to avoid materials containing Fe. Three illustrations. Bibliography: 4 references. [Rostov-on-Don State University]

SUB CODE: IC, EM ENCL: 00

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APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

KHODAKOV, ABRAM LAZAREVICH

DECEASED

C. '62

1964

CRYSTALS
FERROELECTRIC PROPERTIES

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"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

KHODAKOV, B., student.

In the White Russian State University. Radio no.10:11 O '57.
(MIRA 10:10)

1. Khimicheskiy fakul'tet Belorusskogo gosudarstvennogo universiteta imeni V.I.Lenina.
(White Russia--Radio clubs)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

TSAYG, B.A.; KHODAKOV, D.Ye. (Kuybyshev-obl.)

Treatment of fractures of the patella. Kaz. med. zhur. no. 4:90-91 Jl-Ag '60. (MIRA 13:8)
(PATELLA—FRACTURE)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

KHODAKOV, G.S.; KUDRYAVTSEVA, N.L. (Moscow)

Characteristics of the adsorption of gases and vapors on aggregated dispersed materials during their comminution. Zhur.fiz.khim. 37 no.10: 2241-2248 O '63. (MIRA 17:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut novykh stroitel'nykh materialov Akademii stroitel'stva i arkhitektury SSSR.

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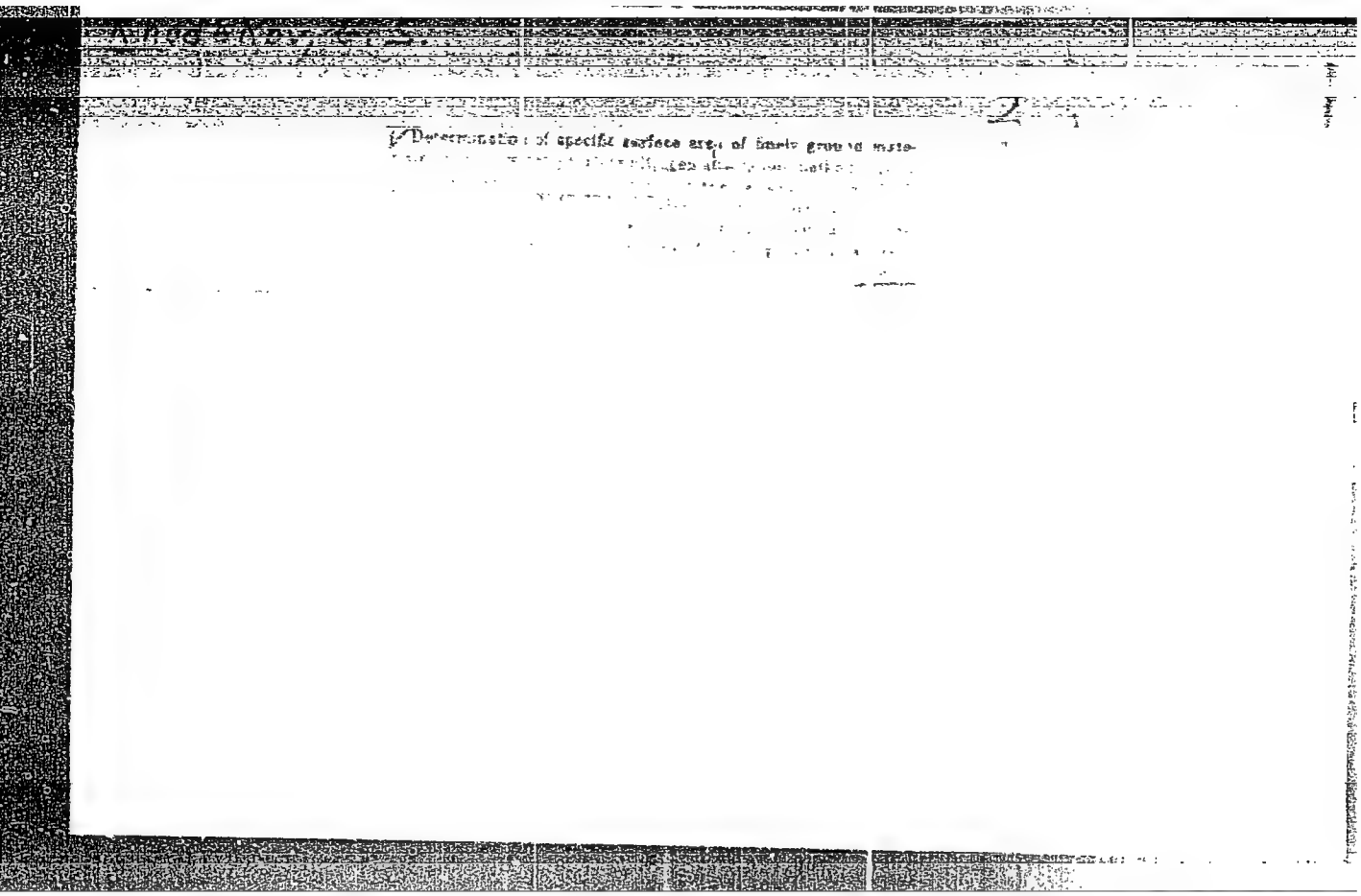

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"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

Determination of the specific surface area of [illegible] materials by the method of low temperature [illegible]

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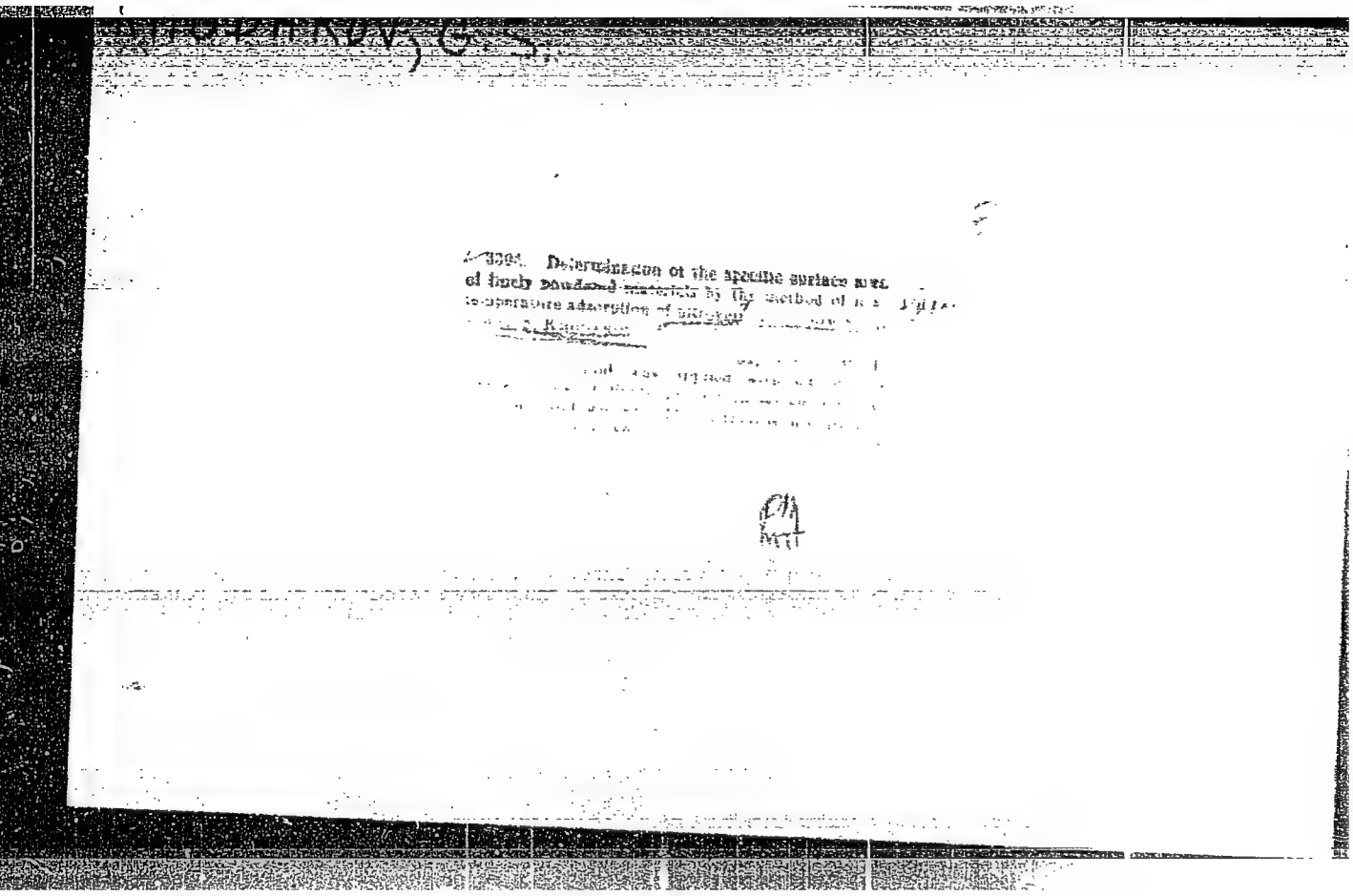

3391. Determination of the specific surface area of finely powdered materials by the method of low-temperature adsorption of nitrogen

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

5(4)

AUTHORS: Khodakov, G. S., Plutsis, E. R. SOV/20-123-4-43/53

TITLE: On the Solubility of Finely Crushed Quartz in Water (O rastvorimosti tonkoizmel'chennogo kvartsa v vode)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 4, pp 725-728 (USSR)

ABSTRACT: The present paper deals with the solubility of quartz powder in distilled water. The degree of dispersion of the powder under investigation was estimated according to its specific surface. The quantity of quartz contained in the solution was photocolorimetrically determined. Also the influence of the glass from which the vessel is made and of the silicon in the steel container was taken into account. The first diagram shows the curves of the kinetics of the dissolution of finely ground quartz sand in water. The course taken by these curves confirms the formation of a true (and not of a colloidal) solution. These curves are well described by the kinetic equation $C = C_{solubility} (1 - e^{-k\tau})$. Here C denotes the concentration of the SiO_2 passing into the solution within the time τ,

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$C_{solubility}$ - the solubility, k - the solution rate constant. $C_{solubility}$ can be determined from the above diagram. The aforementioned equation may be written down as follows:

$\ln \frac{C_{solubility}}{C_{solubility} - C} = k\tau$; it is confirmed by experimental data. The constant k does not depend on the duration of quartz crushing and amounted in the case of the experiments discussed here to 0.056 $days^{-1}$. A prolongation of the duration of the dry crushing of the quartz increases the values of $C_{solubility}$. According to the data obtained, the investigated powders of finely ground quartz sand have practically the same surface. According to the authors' data, the solubility of the finely ground quartz in water at room temperature in some cases attains the value of 120 mg/l, which surpasses the solubility of coarse-crystalline quartz by 20 times its amount. This abnormally high solubility may be explained by a destruction of the crystal structure of quartz in the grinding mill. The here discussed data make it possible to explain the mechanism of the formation of the hydrosilicates of calcium and magnesium

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"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

On the Solubility of Finely Crushed Quartz in Water SOV/20-123-4-43/53

in the interaction of their hydroxides with the finely ground sand in water at room temperature. Also the part played by sand filling medium of concrete with a low cement content, which was ground in a vibration mill, may be explained in a similar manner. The authors thank Academician P. A. Rebinder, D. S. Sominskiy, V. B. Ratinov and L. A. Feygin for discussing results and for their valuable advice, and they also thank N. I. Gludina for her assistance. There are 3 figures, 1 table, and 16 references, 12 of which are Soviet.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut tonkogo izmel'cheniya Akademii stroitel'stva i arkhitektury SSSR (All-Union Scientific Research Institute for Fine Grinding of the Academy of Building and Architecture, USSR)

PRESENTED: July 25, 1958, by P. A. Rebinder, Academician

SUBMITTED: July 23, 1958

Card 3/3

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

5(4)

AUTHORS: Khodakov, G. S., Rebinder, P. A., Academician

SOV/20-127-5-38/58

TITLE: The Investigation of the Fine Dispersion of Quartz and of the Influence of Added Liquids Upon This Process

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 127, Nr 5, pp 1070-1073 (USSR)

ABSTRACT: The effect produced by acetone, ethyl alcohol, water, benzene, triethanolamine and oleic acid upon the dispersion of quartz sand was investigated. Crushing was carried out in a laboratory vibration mill, and determination of the degree of dispersion by measuring the specific surface by means of adsorption of nitrogen at low temperatures according to reference 14. Figures 1-4 and tables 1 and 2 show the experimental results. The addition of liquids causes a considerable increase of the specific surface in comparison to dry-grinding. The effect produced by the individual liquids is about equal. This result is explained by the fact that, in the case of dry grinding, relatively solid particle complexes are produced, the tight packing of which prevents nitrogen from penetrating, so that a large part of the free surface is eliminated. Additions of liquids cause a considerable extent of desaggregation. As

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The Investigation of the Fine Dispersion of Quartz and of the Influence of Added Liquids Upon This Process

shown by figure 3, desaggregation depends upon the quantity of the liquid added. In water, a minimum occurs at an addition of 2-30%, which is followed, as a result of further additions, by a rapid increase of desaggregation. As shown by experiments, the described phenomena are confined not only to quartz alone, but in a different degree characteristic also of other solid substances, such as corundum, and calcite. There are 4 figures, 2 tables, and 19 references, 14 of which are Soviet.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut tonkogo izmel'cheniya Akademii stroitel'stva i arkhitektury SSSR (All-Union Scientific Research Institute for Fine Grinding of the Academy of Building and Architecture, USSR). Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry of the Academy of Sciences, USSR)

SUBMITTED: May 22, 1959

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"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

KHODAKOV, G. S., Cand Phys-Math Sci -- (diss) "Research into processes of quartz dispersion." Moscow, 1960. 18 pp; (Academy of Sciences USSR, Inst of Physical Chemistry); 150 copies; price not given; bibliography at end of text(11 entries); (KL, 26-60, 131)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

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15.2110

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~~5(4)~~

S/020/60/130/06/026/059
B004/B007

AUTHORS: Kiselev, V. F., Krasil'nikov, K. G., Khodakov, G. S.

TITLE: The Influence of the Aggregation of Quartz Particles During Grinding Upon Its Adsorptive Properties

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol 130, Nr 6, pp 1273 - 1276 (USSR)

ABSTRACT: In reference 1 it was said that the specific surface of air-dried quartz decreases with an increase of the duration of grinding. This was explained by the aggregation of the quartz particles. The authors aimed at investigating this phenomenon more thoroughly and to find out whether its effects on the adsorption of nitrogen, and water differ. They maintain that this phenomenon is the cause of the considerable discrepancy in published data for adsorption values and adsorption energy of quartz. Two samples of highly dispersive quartz were investigated. Sample Kv-4 was obtained by grinding transparent crystalline quartz with an excess of water, sample Kv-4A by further grinding Kv-4 in air. On both samples, the adsorption of nitrogen and steam was measured (Table 1). As shown by

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figure 1, the adsorption isothermal line of nitrogen on Kv-4A is lower than in the case of Kv-4 because of particle aggregation, whereas the adsorption isothermal line of steam is higher. Also figure 2 shows that the different kind of grinding the same quartz affects the adsorption of nitrogen and steam differently. This phenomenon has not yet been explained. It is presumed that relatively dense aggregates are formed, the inner surfaces of which are inaccessible to the nitrogen, whereas the adsorption of water is not impaired by these aggregations because of its dispersive (peptizing) properties. Such phenomena of aggregation were observed also in the case of other substances (corundum, calcite, silica gel) in dry grinding. The authors thank Academician P. A. Rebinder for his interest in this paper, and G. I. Aleksandrova for assisting in measurements. There are 2 figures, 1 table, and 21 references, 13 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov). Vsesoyuznyy nauchno-issledovatel'skiy institut novykh stroitel'nykh

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KHODAKOV, G.S.; REBINDER, P.A.

Effect of the medium on the processes of dispersion of solids.
Koll.zhur. 22 no.3:365-375 My-Je '60. (MIRA 13:7)

1. Institut fizicheskoy khimii AN SSSR, Otdel dispersnykh sistem i Institut novykh stroitel'nykh materialov AN SSSR, Moskva.
(Dispersion) (Quartz)

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KHODAKOV, G.S.

Kinetics of the fine comminution of quartz. Dokl. AN SSSR 134 no.3: 574-577 S '60. (MIRA 13:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut novykh stroitel'nykh materialov Akademii stroitel'stva i arkhitektury SSSR. Predstavleno akad. P.A. Rebinderom.

(Quartz)

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KHODAKOV, G.S.; REBINDER, P.A.

Mechanism of comminution of quartz in surface active media [with summary in English]. Koll.zhur. 23 no.4:482-490 Jl-Ag '61. (MIRA 14:8)

1. Institut fizicheskoy khimii AN SSSR, Otdel dispersnykh sistem i Nauchno-issledovatel'skiy institut novykh stroitel'nykh materialov Akademii stroitel'stva i arkhitektury SSSR.
(Quartz)

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KAMAY, G.Kh.; KLABUNOVSKIY, Ye.I.; GATILOV, Yu.F.; KHODAKOV, G.S.

Separation of quaternary arsonium compounds into optical antipodes by asymmetric adsorption on natural dissymmetric adsorbents. Dokl. AN SSSR 139 no.5:1112-1113 Ag '61. (MIRA 14:8)

1. Institut organicheskoy khimii AN SSSR, g. Kazan', i Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR. Predstavleno akademikom B.A. Arbuzovym.
(Arsonium compounds) (Adsorption)

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S/069/62/024/002/008/008
B110/144

AUTHOR: Khodakov, G. S.

TITLE: A case of mechanochemical quartz dispersion

PERIODICAL: Kolloidnyy zhurnal, v. 24, no. 2, 1962, 236 - 237

TEXT: Mechanical and chemical effects were combined in an attempt to reach maximum silica dispersion. Deformation of the crystalline structure by grinding increased the reactivity of silica with calcium or magnesium oxides, in dependence on the duration of the process. Hydrosilicates formed at normal temperatures and pressures. Quartz powders ground to $< 6 m^2/g$ with an M-10(M-10) vibrating mill were studied. Small blocks were formed from aqueous pastes with 9 parts by weight of SiO_2 and 1 part by weight of MgO, and then washed with hot aqueous acetic acid to remove hydrosilicates. Powders of > 200 m^2/g specific surface, approximately 30 times the initial value, were thus obtained. The particle nuclei remained crystalline whereas the amorphous shell passed over into the filtrate. This behavior may be applied to adsorption and catalysis. Electron microscopic studies showed the dispersion to take place in particles of several hundredths μ

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S/020/63/148/003/021/037
B108/B180

5.5650

AUTHOR: Khodakov, G. S.

TITLE: Determining the specific surface of highly disperse powders by rarefied gas filtration

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 148, no. 3, 1963, 581-584

TEXT: Discrepancies appear in the results of specific surface determination of pressed powder samples even at high pressures. They are probably due to the fact that the structural features of the porous body are not adequately considered. Here, the specific surface is expressed on the assumption that the gas molecules passing through the pores undergo a greater number of collisions with the walls of the pores than with other molecules. The experimental work is then reduced to determining the capacities of the sample at two different gas pressures. The specific surface resulting from these data was found to be independent of the porosity of the sample. There are 3 figures.

VB

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KHODAKOV, G.S.

Effect of fine grinding on the physicochemical properties of solids. Usp. khim. 32 no.7:860-881 Jl '63.
(MIRA 16:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut novykh stroitel'nykh materialov.

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KUDRYAVTSEVA, N.L.; KHODAKOV, G.S.

Effect of the additions of surface-active substances on the diminution of clinker. Dokl. AN SSSR 156 no. 2:437-440 My '64. (MIRA 17:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut novykh stroitel'nykh materialov. Predstavleno akademikom P.A.Rebinderom.

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KHODAKOV, G.S.

Mechanical and chemical dissociation of liquids on freshly formed surfaces of solids. Dokl. AN SSSR 156 no.6:1416-1419 Je '64. (MIRA 17:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut novykh stroitel'nykh materialov Akademii stroitel'stva i arkhitektury SSR. Predstavleno akademikom P.A. Rebinderom.

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EDEL'MAN, L.I.; KHODAKOV, G.S.

Sedimentation analysis of disperse systems with continuous recording of the weight of accumulated deposit in the centrifugal field. Koll. zhur. 26 no.3:380-385 My-Je '64. (MIRA 17:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut novykh stroitel'nykh materialov, Moskva.

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KHODAKOV, G.S.; EDEL'MAN, L.I.

Float-type photoelectric recording device for analysis of variance in a centrifugal field. Zav. lab. 30 no.8:1024-1025 '64.
(MIRA 18:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut novykh stroitel'nykh materialov.

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KHODAKOV, G.S.

Mechanical and chemical dissociation of liquids on freshly formed surfaces of solids. Dokl. AN SSSR 156 no.6:1416-1419 Je '64. (MIRA 17:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut novykh stroitel'nykh materialov Akademii stroitel'stva i arkhitektury SSR. Predstavleno akademikom P.A. Rebinderom.

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KHODAKOV, G.S.

Laws governing gas flow through finely porous bodies. Dokl. AN SSSR 163 no.2:350-353 Jl '65. (MIRA 18:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut novykh stroitel'nykh materialov. Submitted December 31, 1964.

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ACC NR: AP6017959 SOURCE CODE: UR/0413/66/000/010/0027/0027

INVENTOR: Khodakov, G. S.

ORG: None

TITLE: A method for producing highly dispersed silica. Class 12, No. 181634 [announced by the All-Union Scientific Research Institute of New Structural Materials (Vsesoyuznyy nauchno-issledovatel'skiy institut novykh stroitel'nykh materialov)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 10, 1966, 27

TOPIC TAGS: silica, quartz, magnesium oxide, calcium oxide

ABSTRACT: This Author's Certificate introduces a method for producing highly dispersed silica from pulverized quartz sand. The process is simplified by adding magnesium oxide or calcium oxide to the initial material and treating the mixture with water after grinding. The solution is then allowed to stand and mineral acid is used for removing hydrosilicates.

SUB CODE: 11/ SUBM DATE: 26Nov63

Card 1/1 UDC: 661.718.5

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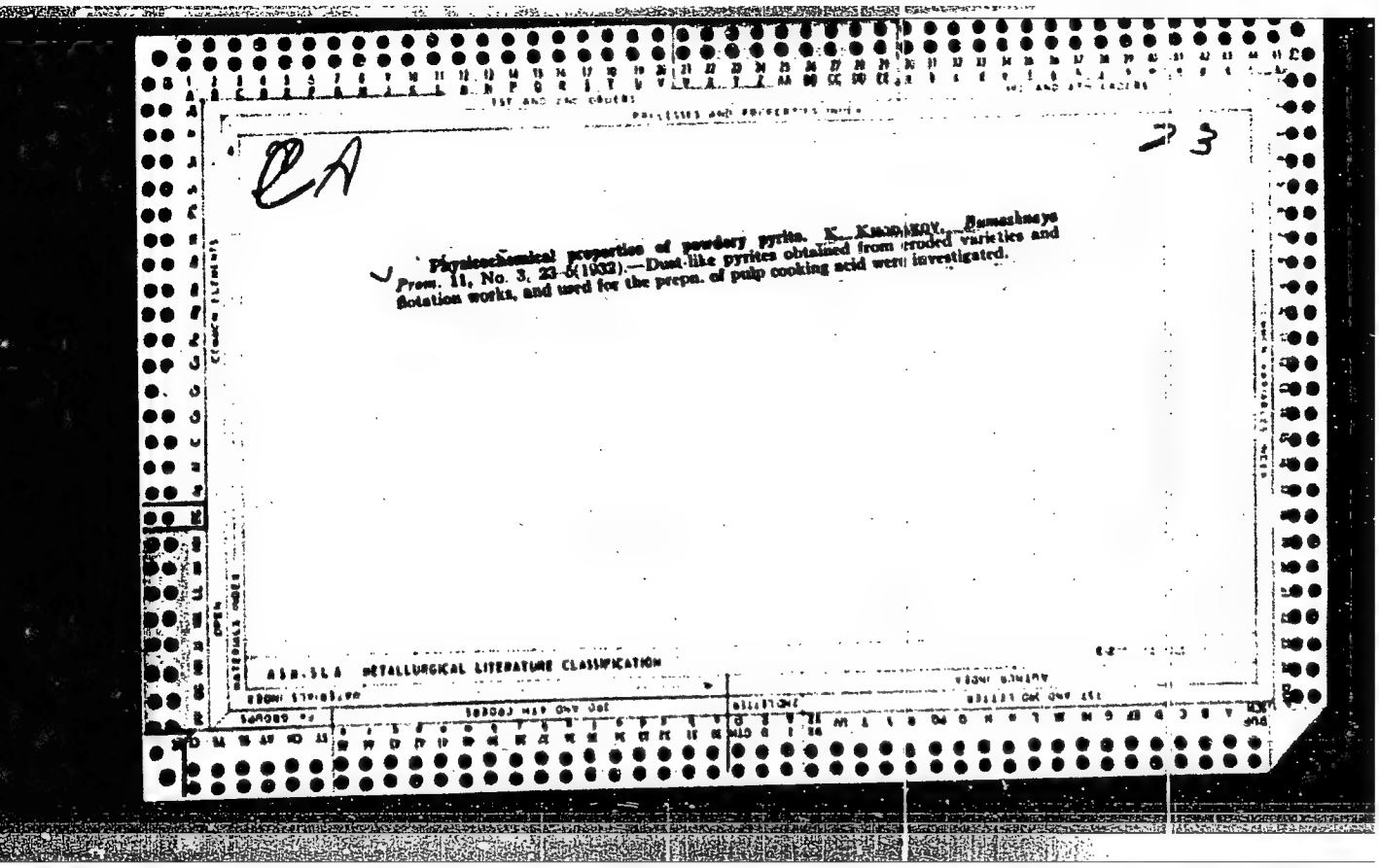
1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX



CA

23

Physicochemical properties of powdery pyrite. K. Khodakov. Bumashnaya Prom. 11, No. 3, 23-5(1932).—Dust-like pyrites obtained from eroded varieties and flotation works, and used for the prepn. of pulp cooking acid were investigated.

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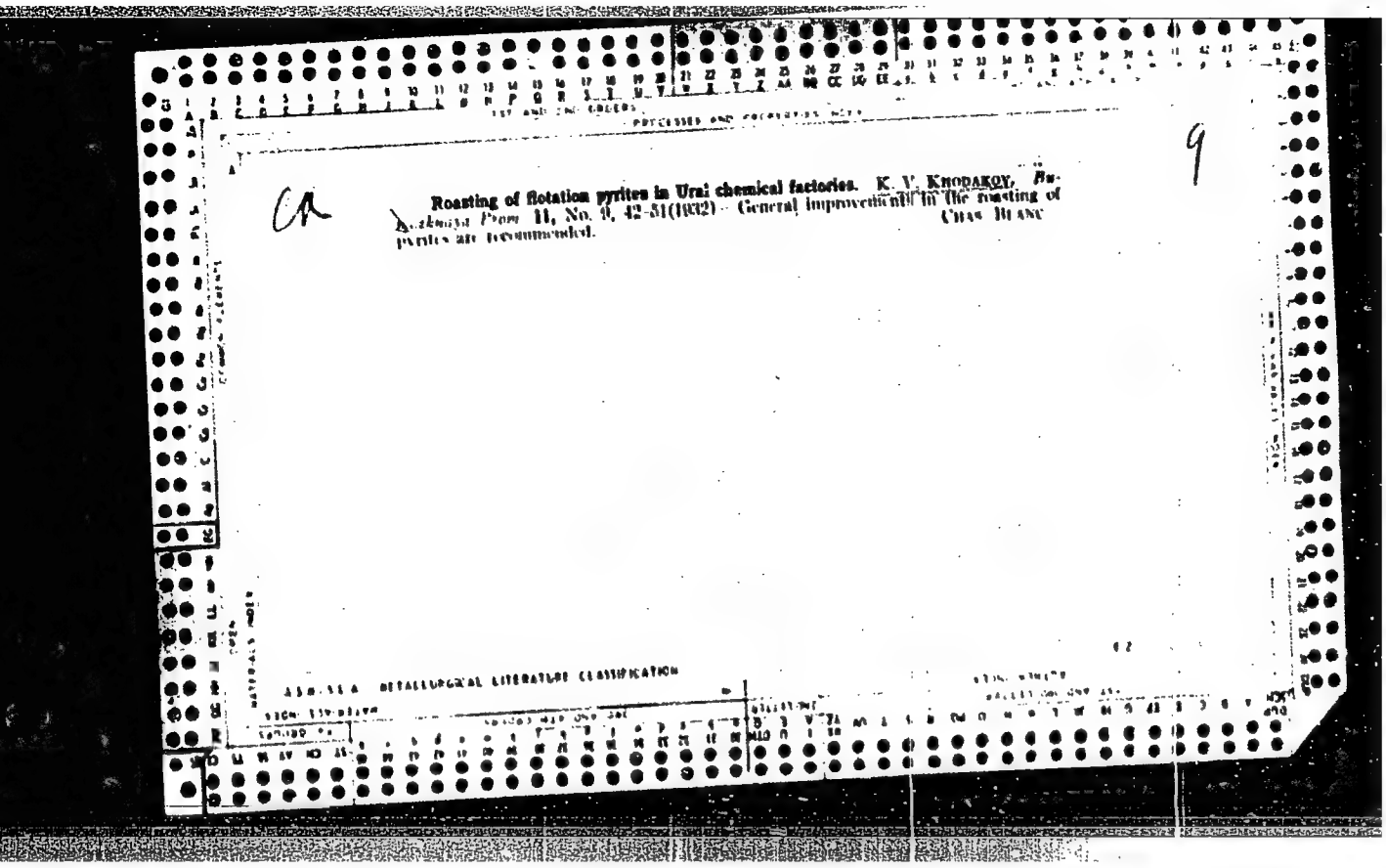

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

9

CA

Roasting of flotation pyrites in Ural chemical factories. K. V. KHODAKOV. *Bu-[illegible] Prom.* 11, No. 9, 42-51(1932).—General improvements in the roasting of pyrites are recommended. CHAS. BLANC

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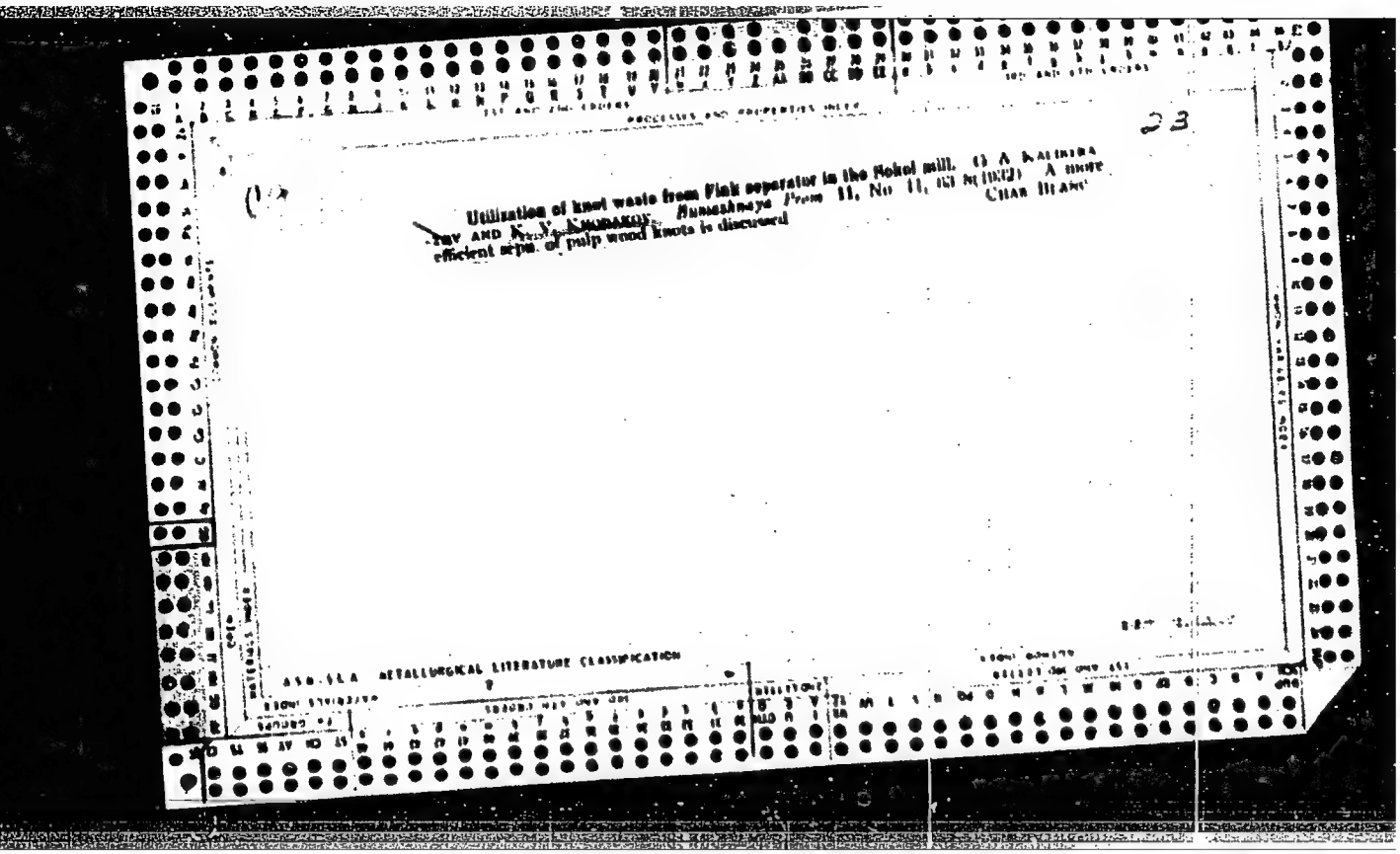

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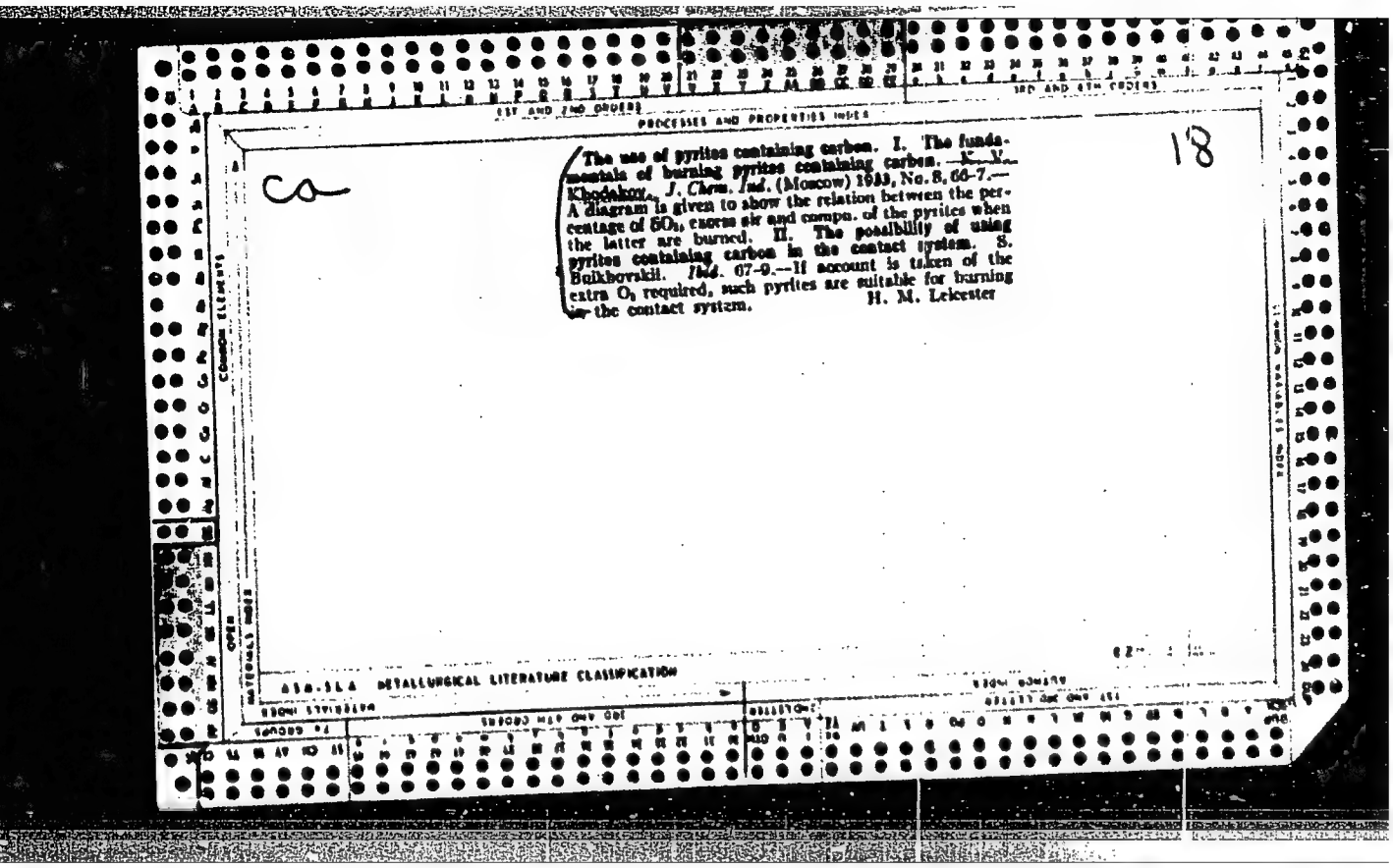

Ca

18

The use of pyrites containing carbon. I. The fundamentals of burning pyrites containing carbon. K. V. Khodakov. *J. Chem. Ind.* (Moscow) 1933, No. 8, 66-7.—A diagram is given to show the relation between the percentage of SO_2, excess air and compn. of the pyrites when the latter are burned. II. The possibility of using pyrites containing carbon in the contact system. S. Bulkhovskii. *Ibid.* 67-9.—If account is taken of the extra O_2 required, such pyrites are suitable for burning in the contact system. H. M. Leicester

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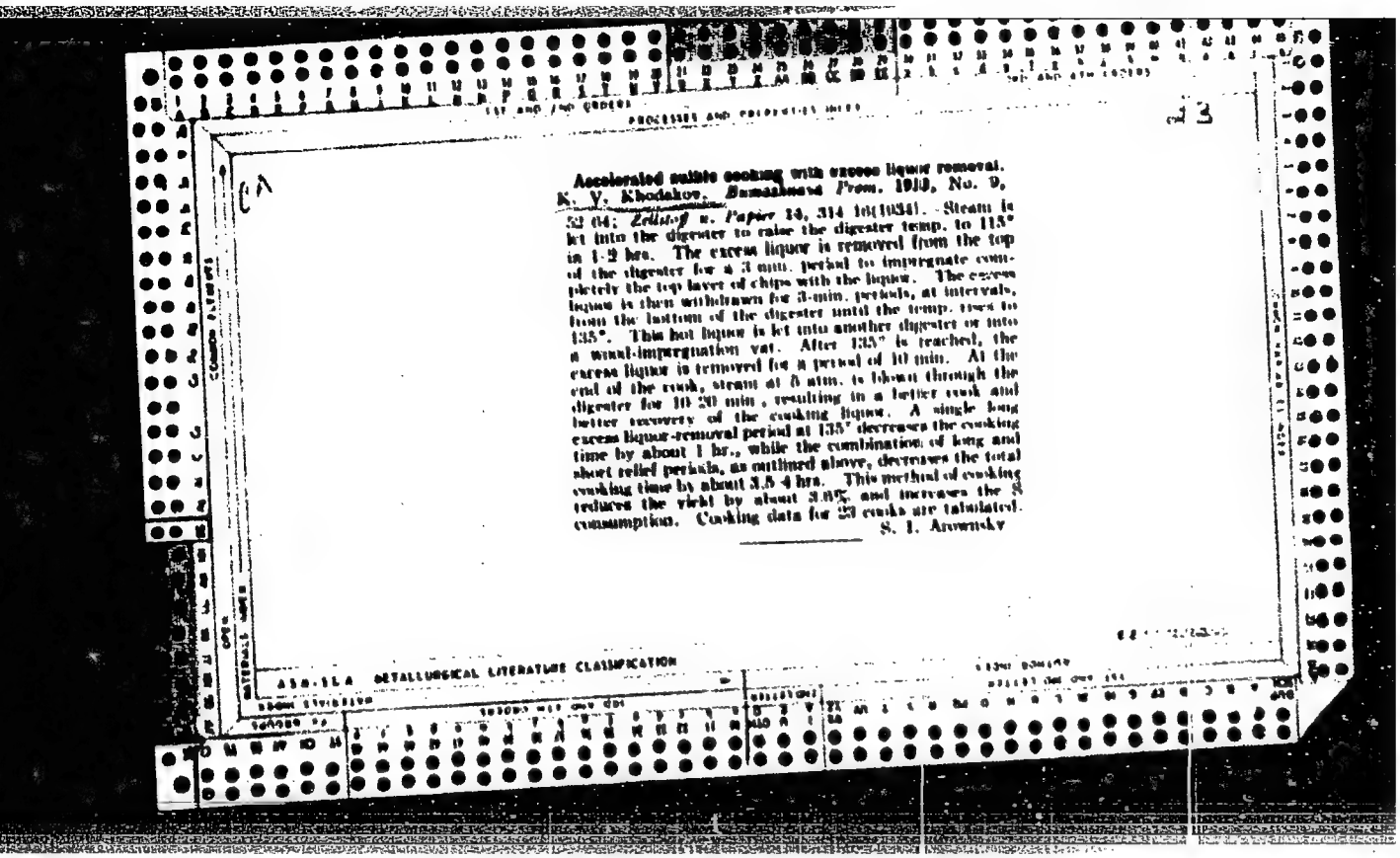

Accelerated sulfite cooking with excess liquor removal. K. V. Khodakov. *Bumazhnaya Prom.* 1940, No. 9, 32-64; *Zellstoff u. Papier* 20, 314-16(1940). - Steam is let into the digester to raise the digester temp. to 115° in 1-2 hrs. The excess liquor is removed from the top of the digester for a 3 min. period to impregnate completely the top layer of chips with the liquor. The excess liquor is then withdrawn for 3-min. periods, at intervals, from the bottom of the digester until the temp. rises to 135°. This hot liquor is let into another digester or into a usual impregnation vat. After 135° is reached, the excess liquor is removed for a period of 10 min. At the end of the cook, steam at 5 atm. is blown through the digester for 10-20 min., resulting in a better cook and better recovery of the cooking liquor. A single long excess liquor-removal period at 135° decreases the cooking time by about 1 hr., while the combination of long and short relief periods, as outlined above, decreases the total cooking time by about 3.5-4 hrs. This method of cooking reduces the yield by about 3.0% and increases the steam consumption. Cooking data for 23 cooks are tabulated.

S. I. Arovnikv

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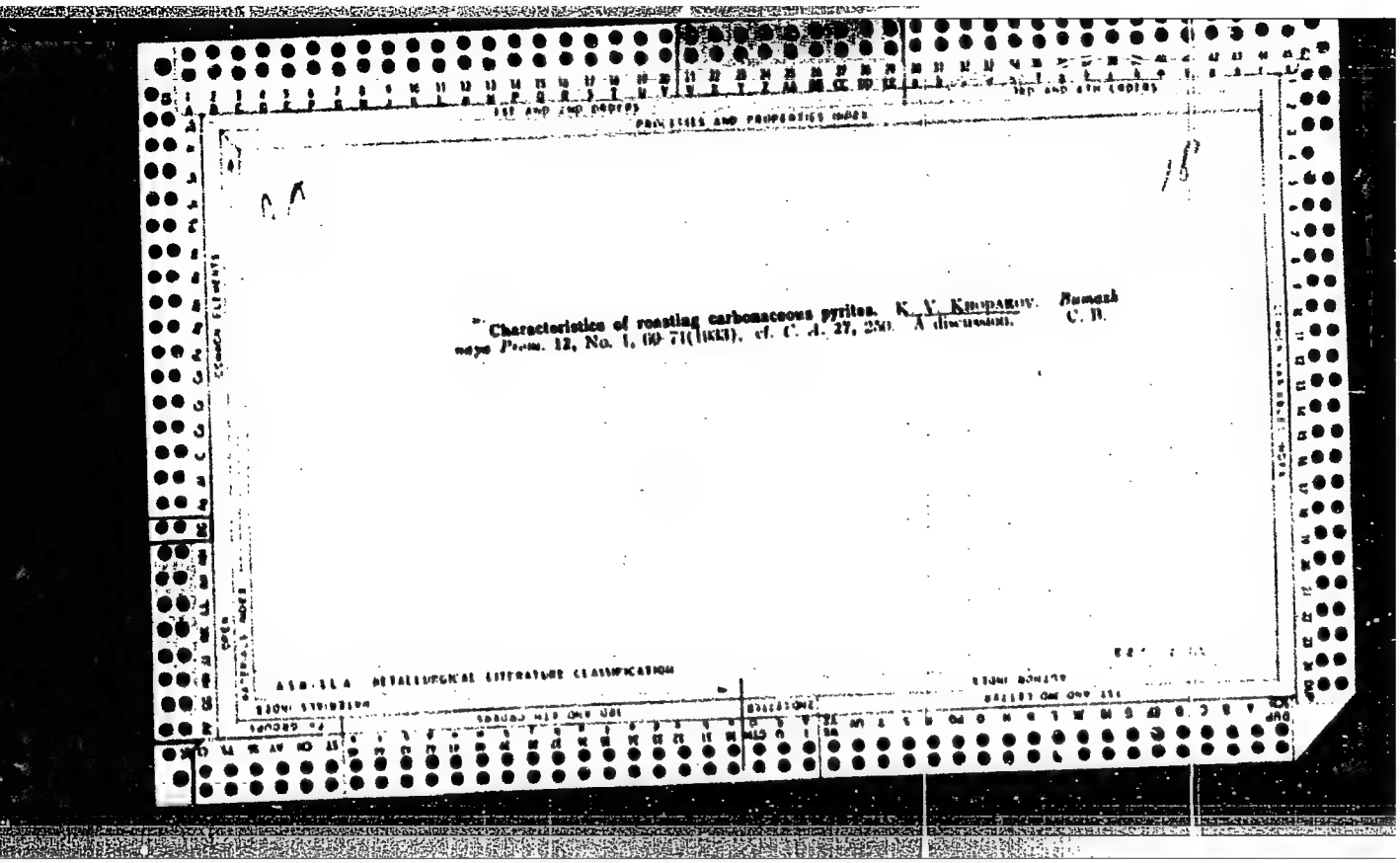

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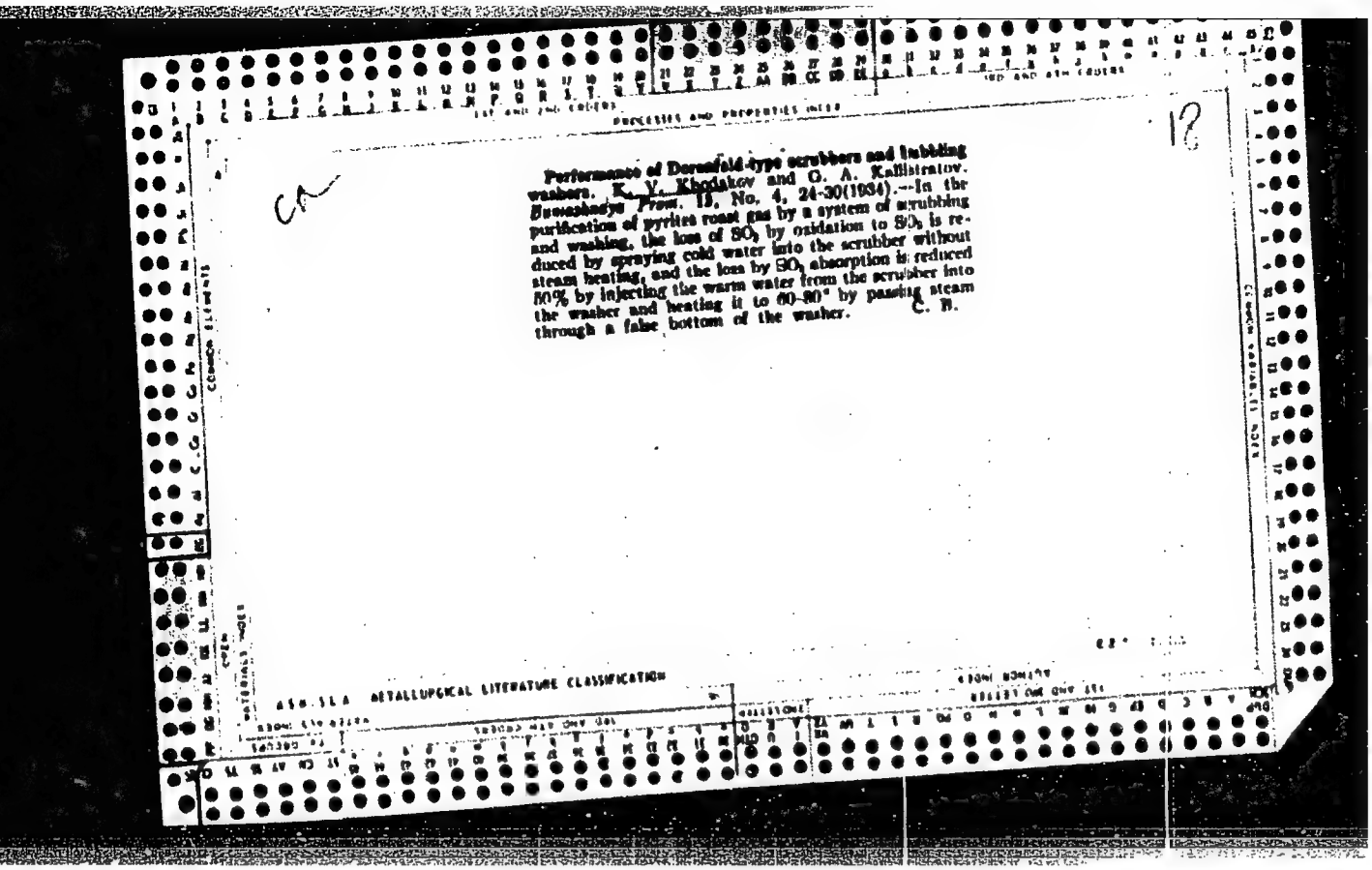

Performance of Dorrnfeld-type scrubbers and bubbling washers. K. V. Khodakov and O. A. Kalliatratov. *Koksokhimiya Prom.* 13, No. 4, 24-30(1934).—In the purification of pyrites roast gas by a system of scrubbing and washing, the loss of SO_2 by oxidation to SO_3 is reduced by spraying cold water into the scrubber without steam heating, and the loss by SO_2 absorption is reduced 50% by injecting the warm water from the scrubber into the washer and heating it to 60-80° by passing steam through a false bottom of the washer. C. B.

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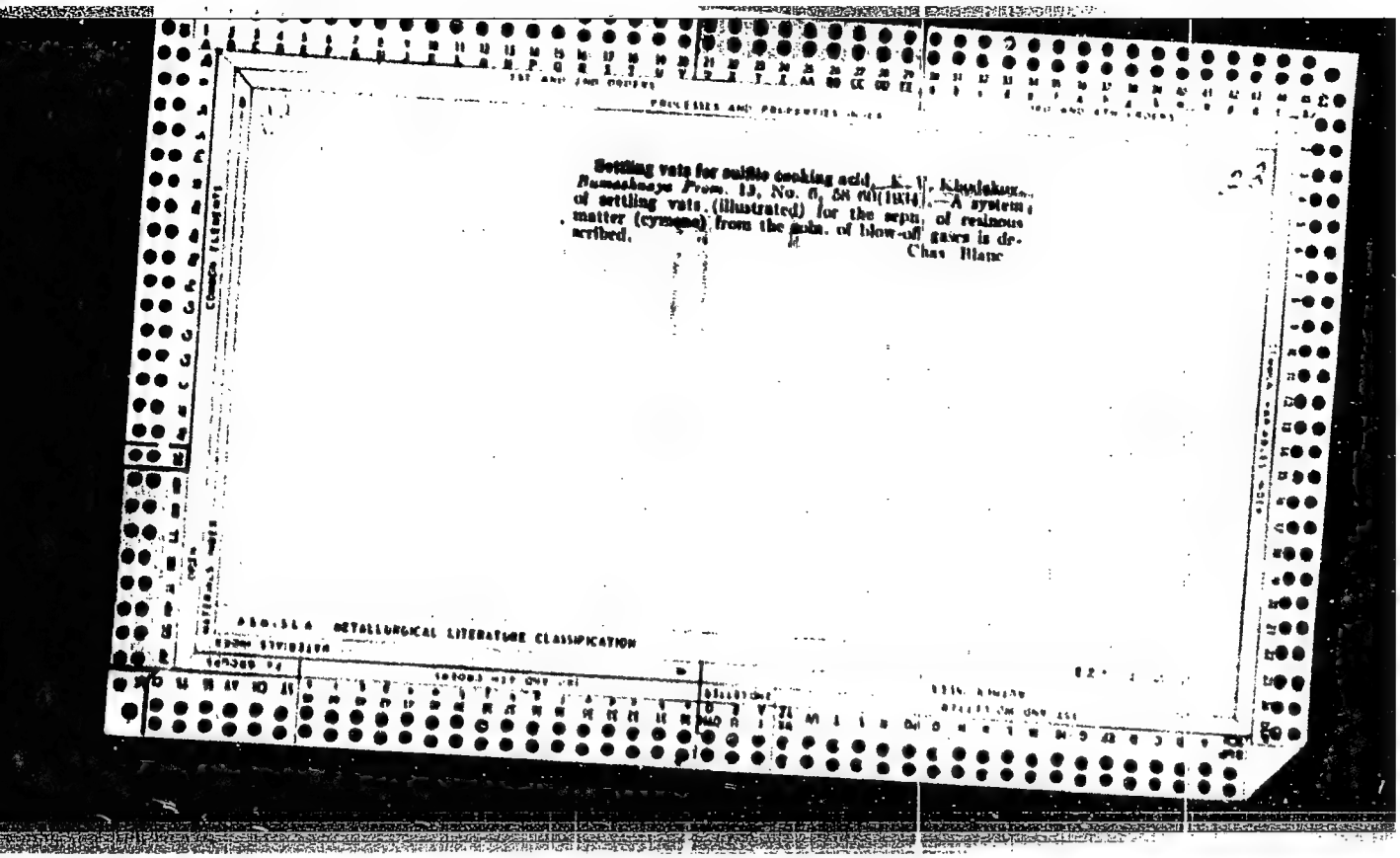

Settling vats for sulfite cooking acid. K. V. Khudyakov. *Bumazhnaya Prom.* 13, No. 6, 58 (1938).—A system of settling vats (illustrated) for the sepn. of resinous matter (cymene) from the soln. of blow-off gases is described.

Chas. Blanc

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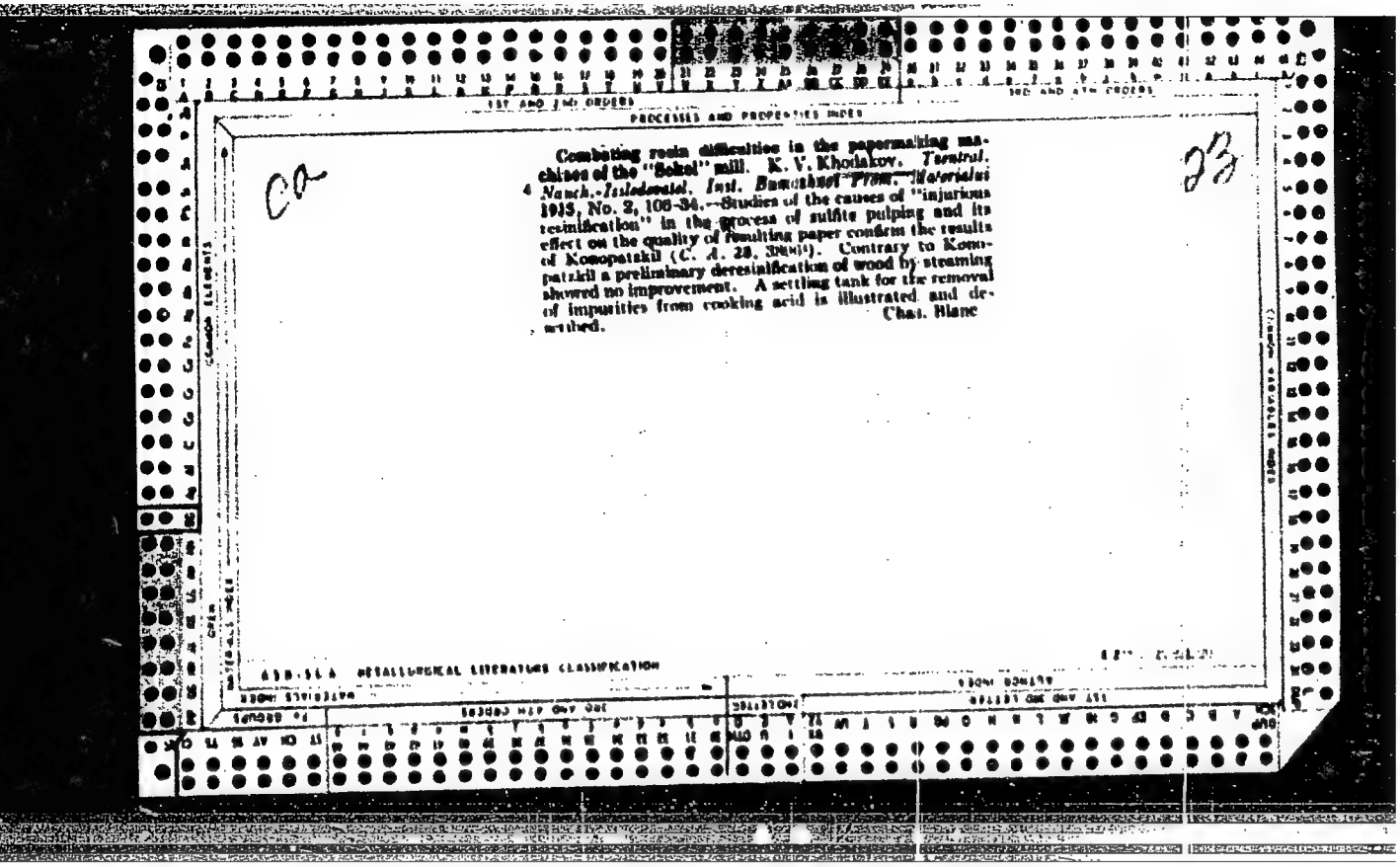

PROCESSES AND PROPERTIES INDEX

Combating resin difficulties in the papermaking machines of the "Bokal" mill. K. V. Kholiakov. *Tsentral. Nauch.-Issledovatel. Inst. Bumazhnoi Prom., Materialui* 1935, No. 2, 106-34.—Studies of the causes of "injurious resinification" in the process of sulfite pulping and its effect on the quality of resulting paper confirm the results of Konopatskii (*C. A.* 28, 3804). Contrary to Konopatskii a preliminary deresinification of wood by steaming showed no improvement. A settling tank for the removal of impurities from cooking acid is illustrated and described.

Chas. Blanc

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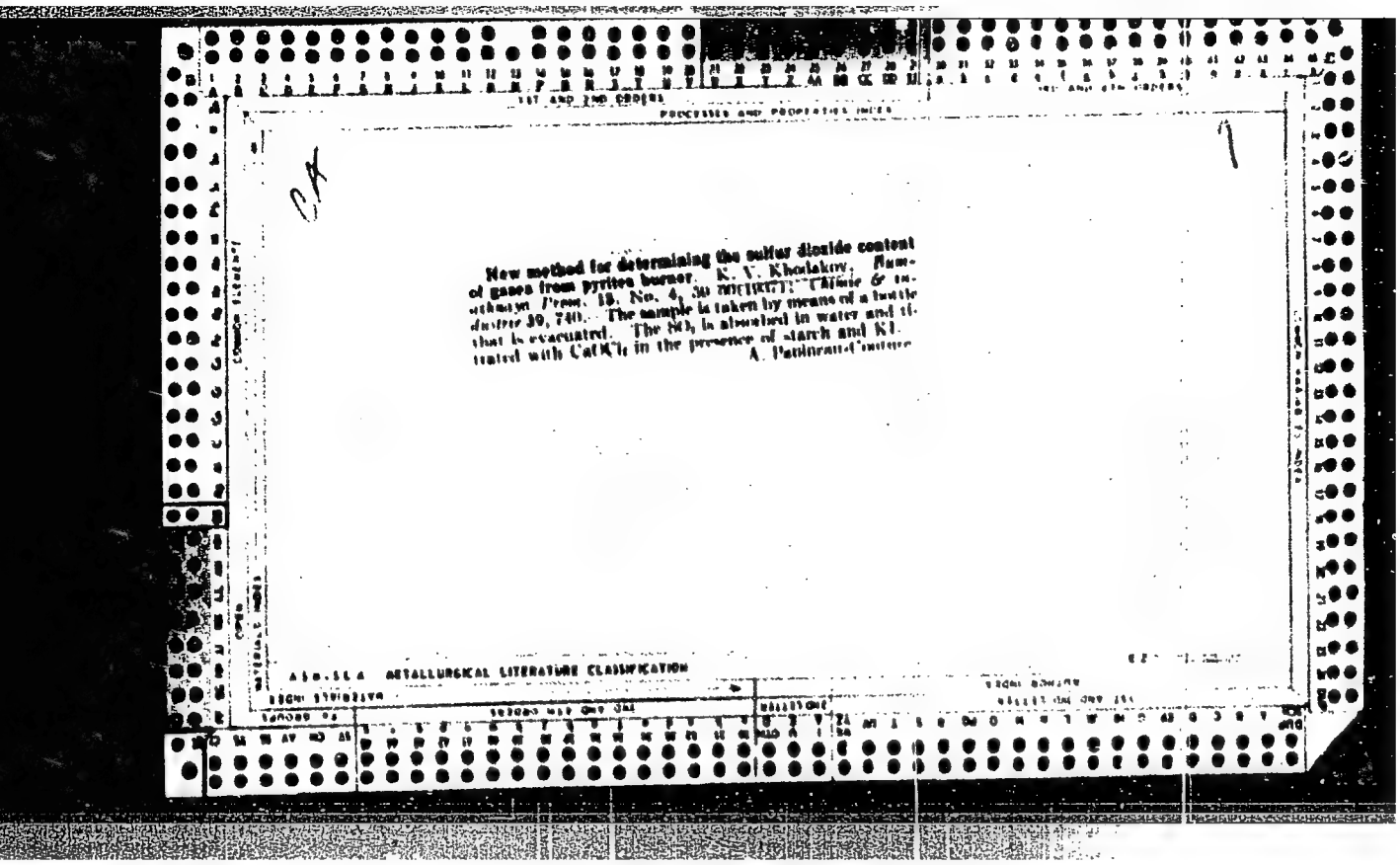
1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

CA

1



New method for determining the sulfur dioxide content of gases from pyrites burner. K. V. Khodakov. *Bumathnaya Prom.* 13, No. 4, 30 [illegible]; *Chimie & industrie* 39, 740. The sample is taken by means of a bottle that is evacuated. The SO_2 is absorbed in water and titrated with $CaOCl_2$ in the presence of starch and KI.

A. Papineau-Couture

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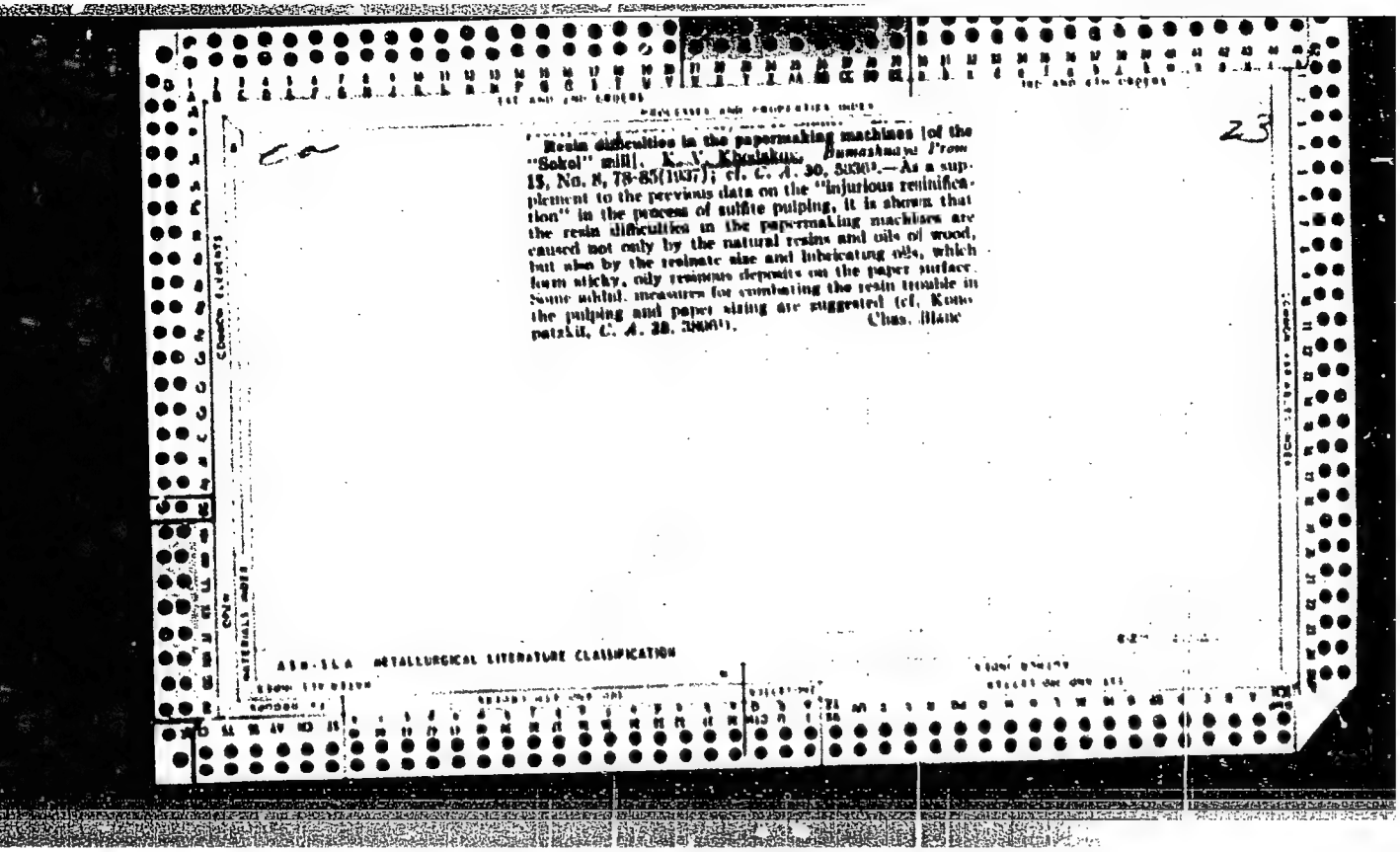

Resin difficulties in the papermaking machines [of the "Sokol" mill]. K. V. Khodakov. *Bumashnaya Prom.* 15, No. 8, 78-85(1937); cf. C. A. 30, 5030[1].—As a supplement to the previous data on the "injurious resinification" in the process of sulfite pulping, it is shown that the resin difficulties in the papermaking machines are caused not only by the natural resins and oils of wood, but also by the resinate size and lubricating oils, which form sticky, oily resinous deposits on the paper surface. Some addnl. measures for combating the resin trouble in the pulping and paper sizing are suggested (cf. Konopatzkii, C. A. 28, 3806[1]). Chas. Blanc

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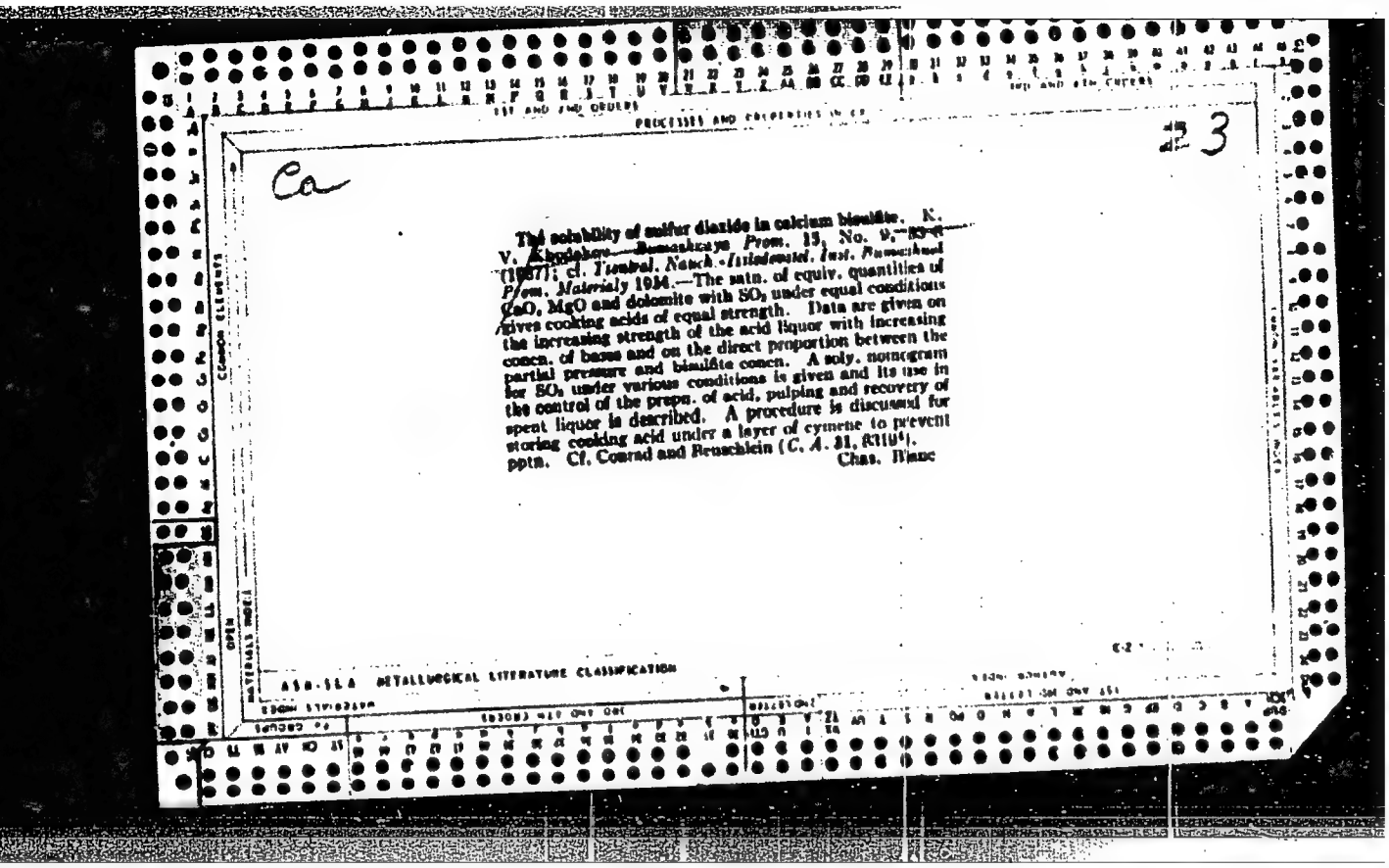

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES IN CP

3RD AND 4TH ORDERS

Ca

3

The solubility of sulfur dioxide in calcium bisulfite. K. V. Khodakov. Bumashnaya Prom. 15, No. 9, [illegible] (1937); cf. Tsentral. Nauch.-Issledovatel. Inst. Bumashnoi Prom. Materialy 1934.—The satn. of equiv. quantities of CaO, MgO and dolomite with SO_2 under equal conditions gives cooking acids of equal strength. Data are given on the increasing strength of the acid liquor with increasing concn. of bases and on the direct proportion between the partial pressure and bisulfite concn. A soly. nomogram for SO_2 under various conditions is given and its use in the control of the prepn. of acid, pulping and recovery of spent liquor is described. A procedure is discussed for storing cooking acid under a layer of cymene to prevent pptn. Cf. Conrad and Beuschlein (C. A. 31, 8319[4]).

Chas. Blanc

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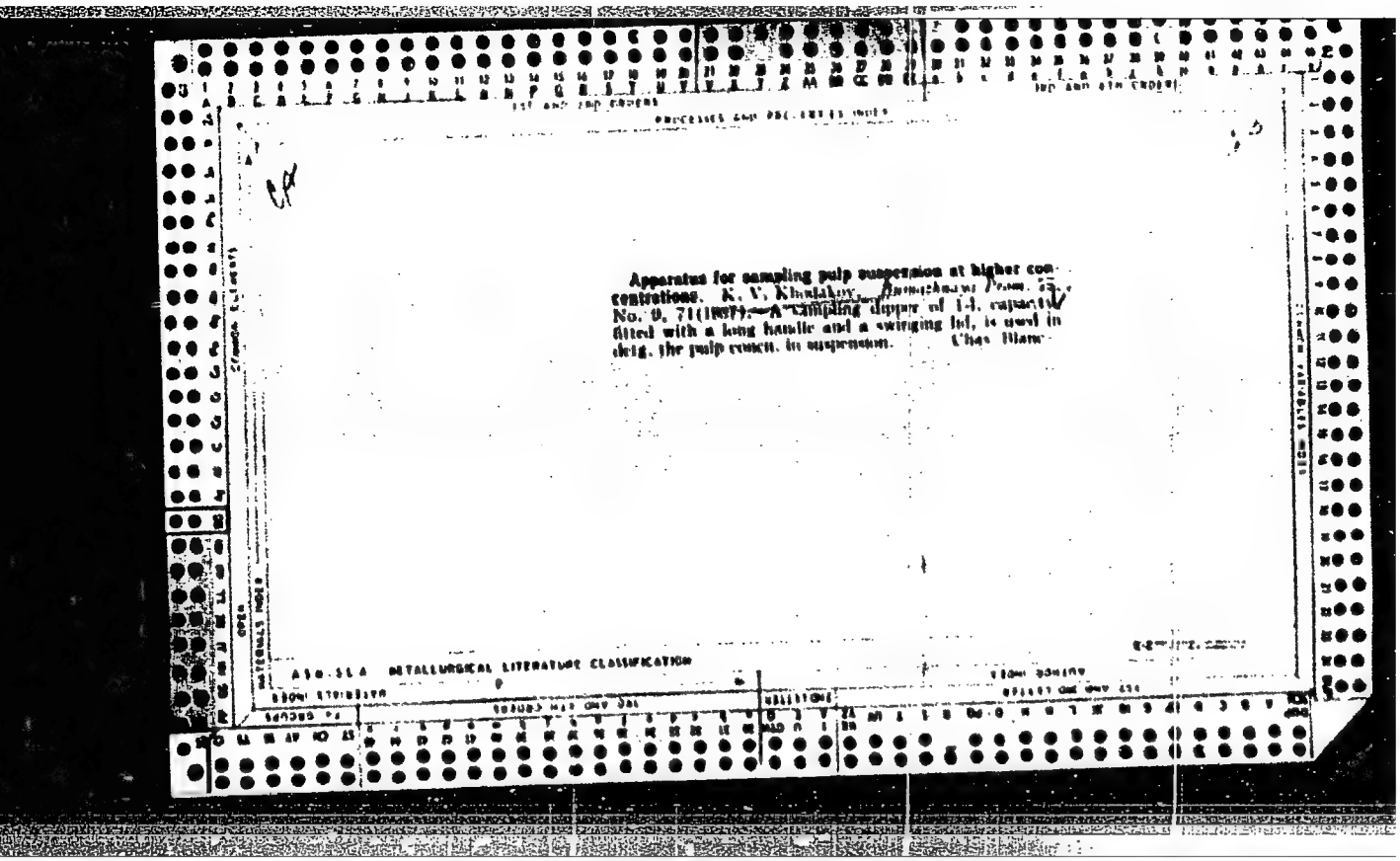

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KHODAKOV, N. D., and ANICHKOV, N.N.

Ueber die Vitalfarbung der oberen Luftwege und des Gehororgans bei Kaninchen. Zeitschr. fur Hals-, Nasen--und Ohrenheilkunde. 37, 4, 284-291, 1935.

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NARAVTSEVICH, Zinoviy Abramovich; KHODAKOV, Naum Moiseyevich; NEYMAN, M.I., red.

[For the participant of a tourist trip] Uchastniku turistskogo pokhoda. Moskva, Meditsina, 1964. 39 p. (MIRA 17:5)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

ZAKHAROV, Ye.D.; GUR'YEV, I.I.; SOLOV'YEVA, V.V.; DRONOVA, N.P.; GIL'DENGORN, I.S.; KHODAKOV, P.Ye.; BONDAREV, B.I.

Nonuniformity in continuously cast ingots and its effect on the quality of semifinished products. Alium. splavy no.3:371-382 '64. (MIRA 17:6)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

KHODAKOV, V.

On the road toward the improvement of farming (from the Regional Agricultural Conference in Rostov-on-Don). Zemledelie 23 no.10: 85-88 O '61. (MIRA 14:9)

(Rostov Province--Agriculture)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

KHODAKOV, V., kand.tekhn.nauk

Improve the operation of water works for fire fighting. Pozh.delo 7 no.12:17-18 D '61. (MIRA 14:11)
(Fire extinction--Water supply)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

KHODAKOV, V. A.

Integrals

Dissertation: "An Intergral With a Small Range." Cand Phys-Math Sci, Mechanics-Mathematics Faculty, Moscow Order of Lenin State U imeni M. V. Lomonosov, 26 Mar 54. (Vechernyaya Moskva -- Moscow, 16 Mar 54).

SO: SUM 213, 20 Sep 1954

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

21C

L 18316-65 EWG(j)/EWT(l)/EWP(e)/EWG(k)/EWT(m)/EPF(c)/EPF(n)-2/EPR/EEC(b)-2/EWP(b) Pz-6/Pr-4/Ps-4/Pu-4 IJP(c)/AFWL/SSD WW/AT/WH

ACCESSION NR: AP4049532 S/0089/64/017/005/0329/0335

AUTHOR: Millionshchikov, M. D.; Gverdtsiteli, I. G.; Abramov, A. S.; Gorlov, L. V.; Gubanov, Yu. D.; Yefremov, A. A.; Zhukov, V. F.; Ivanov, V. Ye.; Kovy*rzin, V. K.; Koptelov, Ye. A.; Kosovskiy, V. G.; Kukharkin, N. Ye.; Kucherov, R. Y.; Laly*kin, S. P.; Merkin, V. I.; Nechayev, Yu. A.; Pozdnyakov, B. S.; Ponomarev-Stepnoy, N. N.; Samarin, Ye. N.; Serov, V. Ya.; Usov, V. A.; Fedin, V. G.; Yakovlev, V. V.; Yakutovich, M. V.; Khodakov, V. A.; Kompaniyets, G. V.

TITLE: The "Romashka" high-temperature reactor-converter 19

SOURCE: Atomnaya energiya, v. 17, no. 5, 1964, 329-335

TOPIC TAGS: nuclear power reactor, reactor feasibility study, research reactor, thermoelectric converter/Romashka

ABSTRACT: The authors briefly describe the construction, parameters, test results, and operating experience of the "Romashka" reactor-

Card 1/2

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

converter unit, which has been in operation at the Kurchatov Atomic Energy Institute since August 1964. The fuel used is uranium dicarbide enriched to 90% U^{235}. Graphite and beryllium are used as reflectors. Electricity is generated by silicon-germanium semiconductor thermocouples distributed on the outer surface of the reflector and connected in four groups which can be connected in series or in parallel. The temperatures of the active zone and outer surface are 1770 and 1000C, respectively. The power ratings are 0.50—0.80 kW electric and 40 kW thermal, the maximum current (parallel connection) is 88 A, the neutron flux is 10^{13} neut/cm^2 sec in the center of the active zone and 7×10^{12} on its boundary. The reactor has a negative temperature reactivity coefficient. The equipment has high inherent stability and requires no external regulator, and little change was observed in the thermocouple properties after 2500 hours of operation. Tests on the equipment parameters are continuing, and the results are being analyzed for use in future designs. Orig. art. has: 8 figures and 1 formula.

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

MILLIONSHCHIKOV, M.D.; GVERDTSITELI, I.G.; ABRAMOV, A.S.; GORLOV, L.V.; GUBANOV, Yu.D.; YEFREMOV, A.A.; ZHUKOV, V.F.; IVANOV, V.Ye.; KOVYRZIN, V.K.; KOPTELOV, Ye.A.; KOSOVSKIY, V.G.; KUKHARKIN, N.Ye.; KUCHEROV, R.Ya.; LALYKIN, S.P.; MERKIN, V.I.; NECHAYEV, Yu.A.; POZDNYAKOV, B.S.; PONOMAREV-STEPNOY, N.N.; SAMARIN, Ye.N.; SEROV, V.Ya.; USOV, V.A.; FEDIN, V.G.; YAKOVLEV, V.V.; YAKUTOVICH, M.V.; KHODAKOV, V.A.; KOMPANIYETS, G.V.

High-temperature reactor-converter "Romashka." Atom. energ. 17 no.5:329-335 N '64. (MIRA 17:12)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

~~KHLOPKIN, N. S.~~

"Temperature-Field of Reactor Fuel Elements at Non-Uniform Heat Removal",

by V. A. Khodakov and N. S. Khlopkin.

Report Presented at 2nd UN Atoms-for-Peace Conference, Geneva, 9-13 Sept 1958

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

KHODAKOV, V. F., Engr

USSR/Metals - Cutting

Aug 50

"Semiautom-tic Machine for Cutting Circular Flanges," Engineers S. A. Gol'denborg, V. F. Khodakov

"Avtogen Delo" No 8, pp 20-22

Describes semiautomatic gas cutting machine for mass production of pipes in shipbuilding industry. Machine is designed to cut flanges of 50-600 mm diameter from steel 10 - 30 mm thick. One advantage is possibility of cutting flanges at very edge of metal sheet, bringing waste to minimum. Productivity is 85 pieces for 8 hours. Operation of four machines for 1½ years demonstrated dependability.

FDD

PA 167T71

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"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

KHODAKOV, V. F.

Moscow Inst of Water Economy Engineers imeni V. R. Vil'yams. Chair of Hydraulics. Moscow, 1956.

KHODAKOV, V. F.- "On the union of a turbulent stream with a calm one in expanding streams." Moscow Inst of Water Economy Engineers imeni V. R. Vil'yams. Chair of Hydraulics. Moscow, 1956.
(Dissertation for the Degree of Candidate in Technical Sciences.)

SO: Knizhnaya Letopis' No. 13, 1956.

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

KHODAKOV, V.F., kand.tekhn.nauk

Union of turbulent and streams in suddenly enlarging channels.
Nauch.zap. MIIVKH 20:198-214 '58. (MIRA 13:6)
(Hydraulics)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

KHODAKOV, V., kand.tekhn.nauk; SHUVALOV, M., inzh.

Useful textbook ("Practical hydraulics in fire prevention" by N.A.Tarasov-Agalakov. Reviewed by V.Khodakov, M.Shuvalov). Pozh.delo 6 no.8:32 Ag '60. (MIRA 13:8)

(Fire prevention) (Hydraulics)
(Tarasov-Agalakov, N.A.)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

KHODAKOV, V.G.; AVSYUK, G.A., otv. red.; OGANOVSKIY, P.N., red.

[The Arctic Ural]Poliarnyi Ural. Moskva. (Its Materialy gliatsiologicheskikh issledovanii). [Snow cover]Snezhnyi pokrov. 1962. 129 p. (MIRA 16:2)

1. Akademiya nauk SSSR. Institut geografii.
(Ural Mountains--Runoff)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

KHODAKOV, V.G.; AVSYUK, G.A., otv. red.; OGANOVSKIY, P.N., red.

[The Arctic Ural]Poliarnyi Ural. Moskva. (Its Materialy gliatsiologicheskikh issledovanii). [Ablation. Runoff]Abliatsiia. Stok. 1962. 140 p. (MIRA 16:2)

1. Akademiya nauk SSSR. Institut geografii.
(Ural Mountains--Glaciology)
(Ural Mountains--Runoff)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

KHODAKOV, V.G.

Possible error in the measurement of precipitation. Meteor. i gidrol. no.6:51-52 Je '64 (MIRA 17:8)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

KHODAKOV, V.G.

Dependence of the total ablation of the surface of glaciers on the air temperature. Meteor. i gidrol. no.7:48-50 Jl '65. (MIRA 18:6)

1. Institut geografii AN SSSR.

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

L 45786-66 JT/JXT(BF)
ACC NR: AR6016024 SOURCE CODE: UR/0271/66/000/001/B030/B030

AUTHOR: Khodakov, V. Ye.

39
B

TITLE: Use of an APM-1 typewriter in computer output devices

28 p

SOURCE: Ref. zh. Avtomat. telemekh. i vychisl. tekhn., Abs. 1B214

REF SOURCE: Avtomatika i priborostr. Inform. nauchno-tekhn. sb., no. 2(22), 1965, 31-33

TOPIC TAGS: digital computer, printer, automatic printer/APM-1 printer

ABSTRACT: The automatic APM-1 printer developed at the Scientific Research Institute of Control Computers (NII upravlyayushchikh VM) is described. Since its parameter printing is done line by line, data concerning each parameter are arranged in columns making it possible to rapidly analyze the course of the process. The printer operates according to the principle of "quick printing" (the type carrying wheel rotates at a constant speed). During printing, an electromagnet actuates the hammer when the selected sign passes underneath it. At the moment of printing, the paper tape stops and then advances on step. Because the typewriter contains 24 characters, a 5-digit binary code is required.

Card 1/2 UDC: 681.142.623

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

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L 45786-66
ACC NR: AR6016024

0

The typewriter and digital computer are coupled by a circuit using ferrite-diode elements and transistorized amplifiers. The control circuit uses RMUG-type relays and telephone-type keys. The functional diagram of printing control and the electromechanical diagram of the control device are described. State tests of the experimental model of the typewriter and two years of test operation have demonstrated its high reliability. Orig. art. has: 2 illustrations. [Translation of abstract]

[DW]

SUB CODE: 09/

Card 2/2 pb

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

L 62253-65 EWT(d)/EED-2/EWP(1) IJP(c) BB/GG

ACCESSION NR: AP5016087 UR/0302/65/000/002/0031/0033
681.142.623

AUTHOR: Khodakov, V. Ye. 44

TITLE: Using an APM-1 printer at the computer output 44

SOURCE: Avtomatika i priborostroyeniye, no. 2, 1965, 31-33

TOPIC TAGS: computer printer, on the fly printer / APM-1 printer

ABSTRACT: The development and test results of the first Soviet on-the-fly printer APM-1 are reported. The high-speed line printer uses a continuously rotating print wheel carrying 24 characters; they are selected by a 5-digit binary code. Fast-acting hammers print the characters. The printer is connected to the computer via a control unit which comprises ferrite-diode logical elements and semiconductor amplifiers. Functional and principal circuits of this are presented and their operation is briefly explained. During the two-year [illegible] of an APM-1 on-the-fly printer prototype, no failure of a major component occurred. Orig. art. has: 2 figures.

Card 1/2

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"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

L 62253-65

ACCESSION NR: AP5016087

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: DP, IE

NO REF SOV: 000 OTHER: 000

Card 2/2

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"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

KSHEMINSKIY, E.I.; KHODAKOV, V.Ye.

Transducer for indicating angular positions of a shaft in automatic printing machines. Avtom. i prib. no.1:58-60 Ja-Mr '65. (MIRA 18:8)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

CHURANOV, S., prepodavatel'; KHODAKOV, Yu., prof.; CHERTKOV, I., prepodavatel' khimii

Problems and experiments in chemistry. Nauka i zhizn' 30 no.4: 98 Ap '63. (MIRA 16:7)

1. Moskovskiy gosudarstvennyy universitet (for Churanov). 2. Kafedra khimii Moskovskogo aviatsionnogo ordena Lenina instituta im. Sergo Ordzhonikidze (for Khodakov). 3. Nauchno-issledovatel'skiy institut obshchego i politekhnicheskogo obrazovaniya Akademii pedagogicheskikh nauk RSFSR (for Chertkov). (Chemistry—Problems, exercises, etc.)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

MINACHEV, Kh.M.; KHODAKOV, Yu.S.

Kinetics of hydrogenation of the vinyl ether of β-(diethylamino) ethanol and vinyl phenyl ether on 1% pd/Al O. Izv.AN SSSR Otd.khim. nauk no.4:722-724 Ap '61. (MIRA 14:4)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Ether) (Hydrogenation)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

MINACHEV, Kh.M.; MARKOV, M.A.; KHODAKOV, Yu.S.

Effect of gamma rays on the catalytic activity of platinized aluminosilicate. Izv. AN SSSR. Otd.khim.nauk no.7:1227-1230 Jl '61. (MIRA 14:7)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.
(Aluminosilicates) (Catalysis) (Gamma rays)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

MINACHEV, Kh.M.; KHODAKOV, Yu.S.

Effect of gamma rays on the activity of platinum-containing catalysts. Izv. AN SSSR. Otd.khim.nauk no.8:1430-1432 Ag '61. (MIRA 14:8)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.
(Gamma rays) (Catalysis) (Platinum)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

KHODAKOV, Yu.S.; MINACHEV, Kh.M.

Kinetic relations of hydrogen peroxide decomposition on γ-irradiated and nonirradiated lanthanum hydroxide. Zhur. fiz. khim. 37 no.11:2445-2450 N'63. (MIRA 17:2)

1. Institut organicheskoy khimii imeni Zelinskogo, AN SSSR.

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

L 48591-65 EWT(m)/EPF(c)/EWP(j)/EWP(t)/EWP(b) Pe-4/Pr-4 IJP(c)
JD/JG/RM

ACCESSION NR: AP5006775 S/0195/65/006/001/0089

AUTHOR: Minachev, Kh. M.; Khodakov, Yu. S.

TITLE: Study of the catalytic properties of the rare earth elements in the reaction of the transformation of normal butane

SOURCE: Kinetika i kataliz, v. 6, no. 1, 1965, 89-94

TOPIC TAGS: rare earth element, butane, transformation, lanthanum, cerium, praseodymium, neodymium, samarium, homium, erbium, dysprosium, ytterbium, [illegible] terbium

ABSTRACT: Circulation-flow and static methods were used to investigate the catalytic properties of the oxides of lanthanum, cerium, praseodymium, neodymium, samarium, [illegible] dysprosium, ytterbium, thulium, and terbium [illegible] transformation of normal butane at 400-5[illegible]°. The catalytic [illegible] oxide were also studied in the transformation of propylene, ethane, [illegible] Prepared catalysts were heated in a muffle furnace at 650° for 5 hours. The [illegible] were conducted both with a flow-circulation unit and a static unit (see figs. 1 and 2 of the Enclosure). The kinetics of the reaction in all cases were described [illegible]

Card 1/2

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"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

L 48581-65
ACCESSION NR: AP5005775

2

an equation of the first order. Specific rates, preexponential factors, and energies of activation were determined for all the oxides studied [illegible] earth oxide series. The authors express their gratitude to [illegible] participating in the experimental work." Orig. art. has: 6 figures, 3 tables, 1 equation.

ASSOCIATION: Institut organicheskoy khimii imeni N. D. Zelinskogo AN SSSR (Institute of Organic Chemistry, AN SSSR)

SUBMITTED: 26Jul63 ENCL: 02 SUB CODE: IC, OC

NO REF SOV: 005 OTHER: 005

Card 2/4

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

KHODAKOV, Yu.S.; MINACHEV, Kh.M.; STERLIGOV, O.D.

Kinetics of the catalytic dehydrogenation of butane to butylenes. Dokl. AN SSSR 165 no.2:344-346 N '65.
(MIRA 18:11)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.
Submitted April 12, 1965.

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

KHODAKOV, Yu.V.; ZHURAVLEVA, T.M.; MIL'CHENKO, V.V.

Determination of chromate and dichromate simultaneously. Zav.lab. 29 no.8:929 '63. (MIRA 16:9)

1. Moskovskiy aviatsionnyy institut imeni S.Ordzhonikidze.
(Chromates) (Dichromates)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5"

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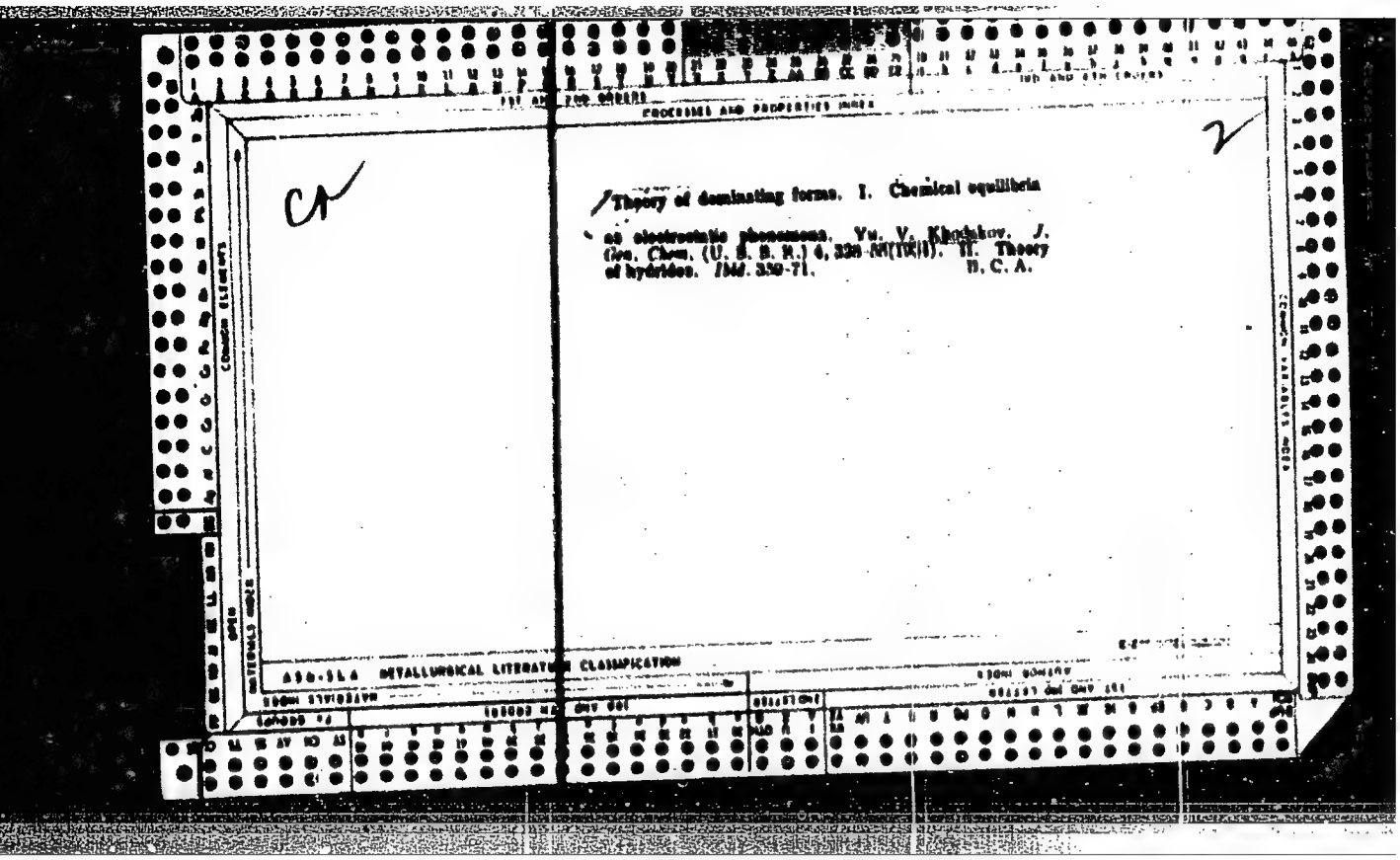

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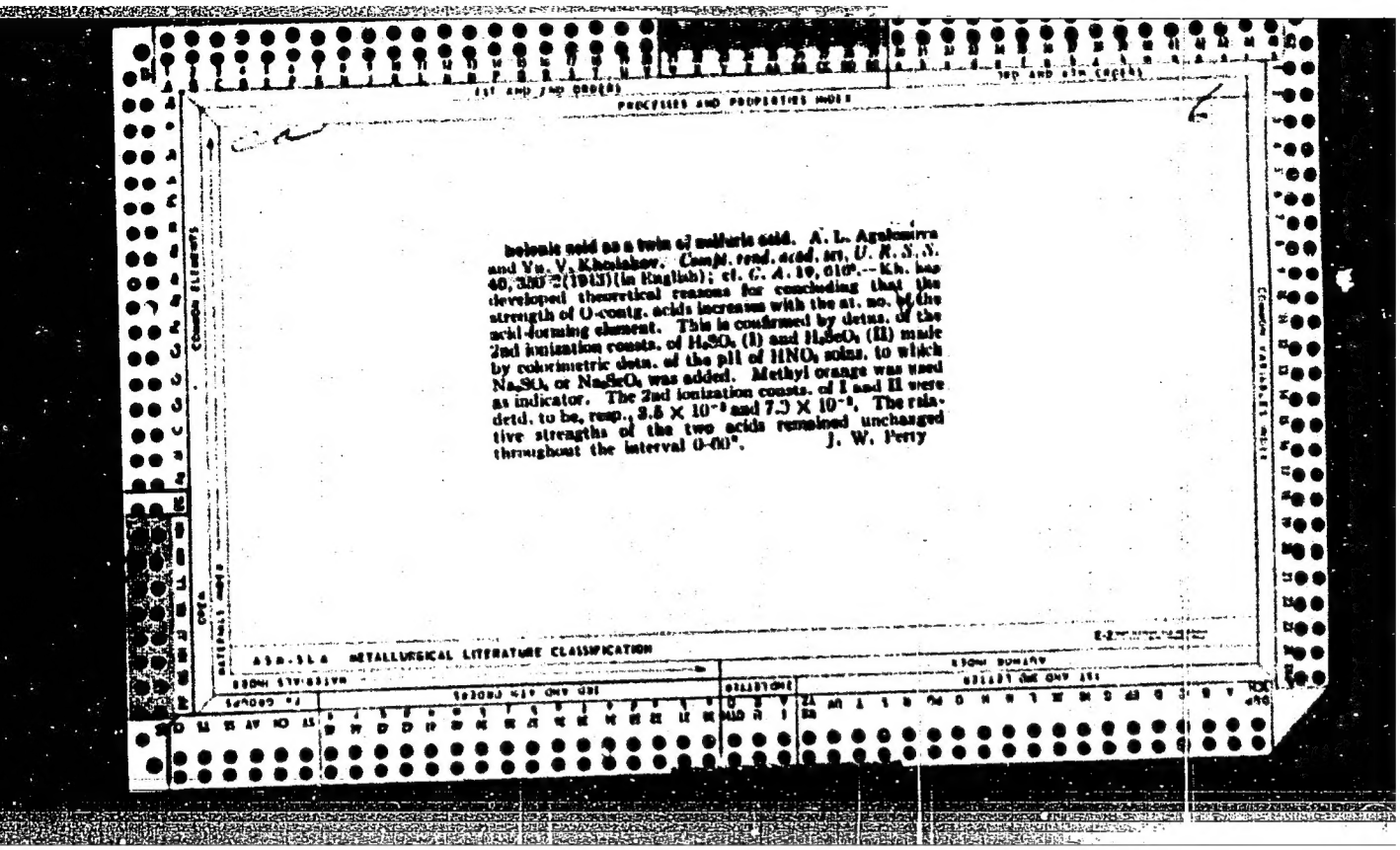

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

Ca

6

Selenic acid as a twin of sulfuric acid. A. L. Agalonova and Yu. V. Khodakov. *Compt. rend. acad. sci. U. R. S. S.* 40, 350-2(1943)(in English); cf. *C. A.* 19, 610[6].—Kh. has developed theoretical reasons for concluding that the strength of O-contg. acids increases with the at. no. of the acid-forming element. This is confirmed by detns. of the 2nd ionization consts. of H_2SO_4 (I) and H_2SeO_4 (II) made by colorimetric detn. of the pH of HNO_3 solns. to which Na_2SO_4 or Na_2SeO_4 was added. Methyl orange was used as indicator. The 2nd ionization consts. of I and II were detd. to be, resp., 3.5×10^{-3} and 7.3×10^{-3}. The relative strengths of the two acids remained unchanged throughout the interval 0-60°. J. W. Perry

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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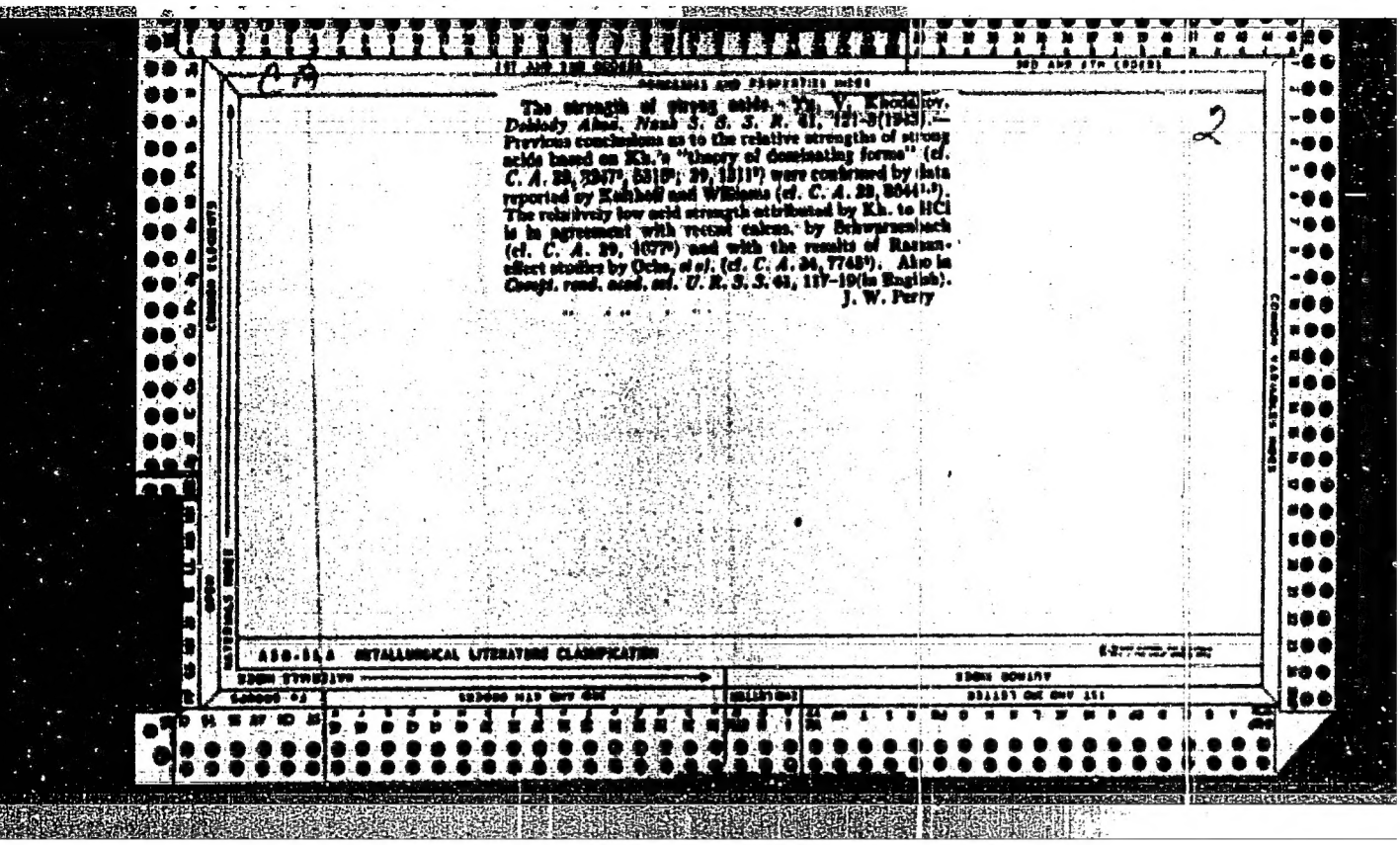
1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

2



The strength of strong acids. Yu. V. Khodakov. *Doklady Akad. Nauk S. S. S. R.* 41, 121-3(1943).—Previous conclusions as to the relative strengths of strong acids based on Kh.'s "theory of dominating forms" (cf. *C. A.* 28, 3247[3], 5315[3]; 29, 1311[3]) were confirmed by data reported by Kolthoff and Williams (cf. *C. A.* 28, 8044[1,2]). The relatively low acid strength attributed by Kh. to HCl is in agreement with recent calcns. by Schwarzenbach (cf. *C. A.* 29, 1077[3]) and with the results of Raman-effect studies by Ochs, *et al.* (cf. *C. A.* 34, 7745[3]). Also in *Compt. rend. acad. sci. U. R. S. S.* 41, 117-19(in English).

J. W. Perry

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

MATERIALS INDEX

AUTHOR INDEX

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"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722120002-5

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

Ca

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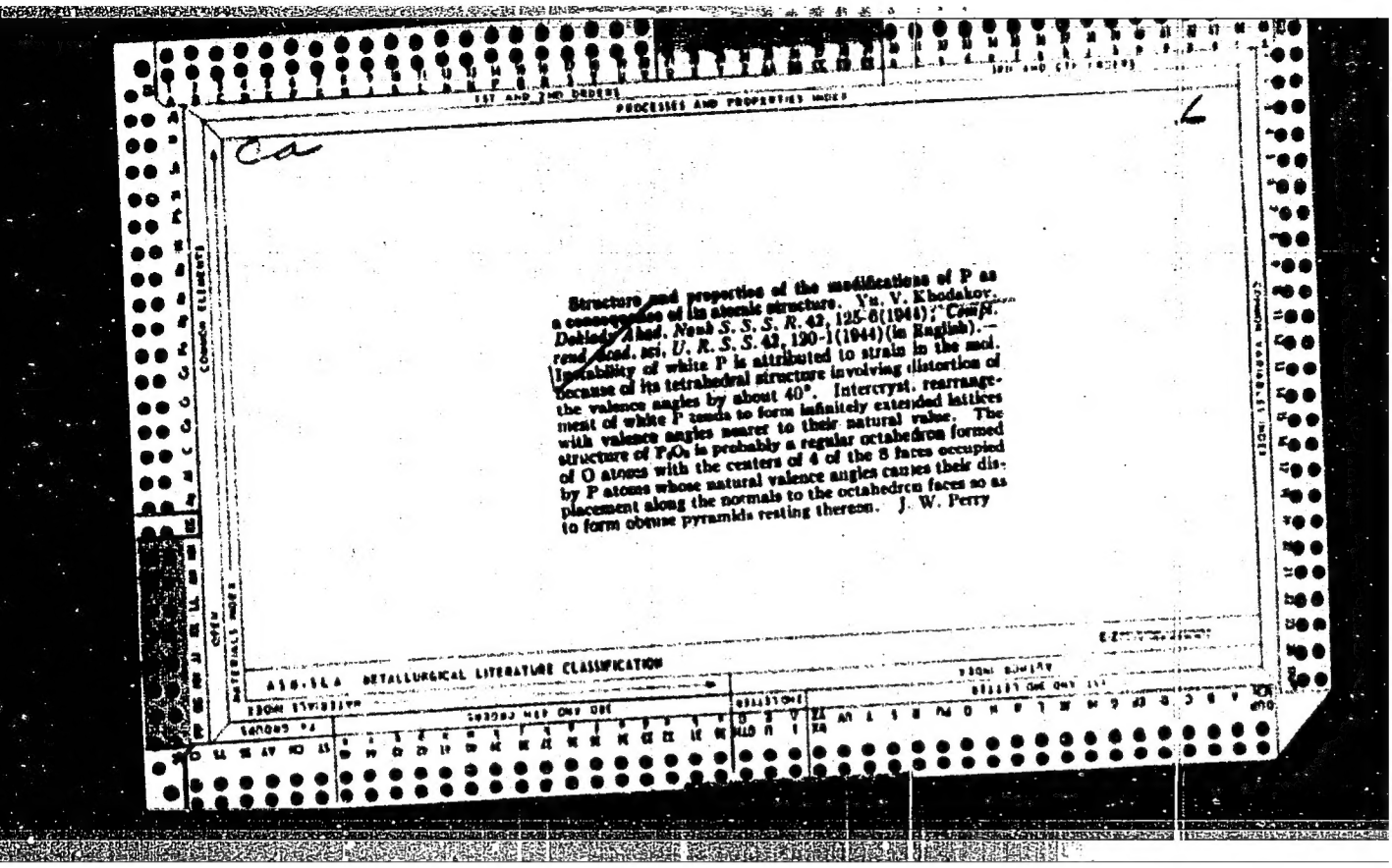

Structure and properties of the modifications of P as a consequence of its atomic structure. Yu. V. Khodakov. *Doklady Akad. Nauk S. S. S. R.* 42, 125-6(1944); *Compt. rend. acad. sci. U. R. S. S.* 42, 120-1(1944)(in English).—Instability of white P is attributed to strain in the mol. because of its tetrahedral structure involving distortion of the valence angles by about 40°. Intercryst. rearrangement of white P tends to form infinitely extended lattices with valence angles nearer to their natural value. The structure of P_4O_6 is probably a regular octahedron formed of O atoms with the centers of 4 of the 8 faces occupied by P atoms whose natural valence angles causes their displacement along the normals to the octahedron faces so as to form obtuse pyramids resting thereon. J. W. Perry

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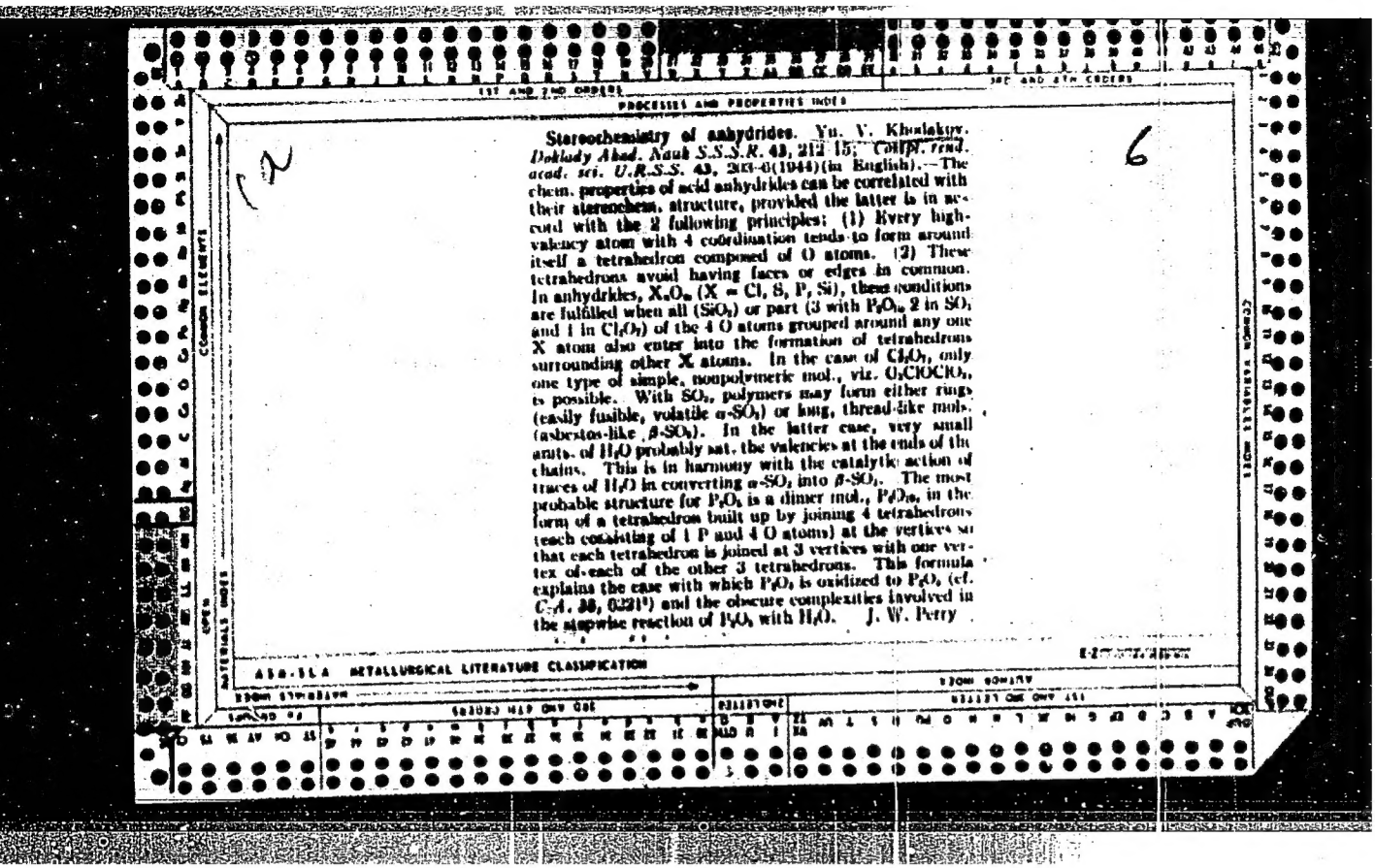

Stereochemistry of anhydrides. Yu. V. Khodakov. *Doklady Akad. Nauk S.S.S.R.* 43, 212-15; *Compt. rend. acad. sci. U.R.S.S.* 43, 203-6(1944)(in English).—The chem. properties of acid anhydrides can be correlated with their stereochem. structure, provided the latter is in accord with the 2 following principles: (1) Every high-valency atom with 4 coördination tends to form around itself a tetrahedron composed of O atoms. (2) These tetrahedrons avoid having faces or edges in common. In anhydrides, X_2O_n (X = Cl, S, P, Si), these conditions are fulfilled when all (SiO_2) or part (3 with P_2O_n, 2 in SO_3 and 1 in Cl_2O_7) of the 4 O atoms grouped around any one X atom also enter into the formation of tetrahedrons surrounding other X atoms. In the case of Cl_2O_7, only one type of simple, nonpolymeric mol., viz. $O_3ClOClO_3$, is possible. With SO_3, polymers may form either rings (easily fusible, volatile α-SO_3) or long, thread-like mols. (asbestos-like, β-SO_3). In the latter case, very small amts. of H_2O probably sat. the valencies at the ends of the chains. This is in harmony with the catalytic action of traces of H_2O in converting α-SO_3 into β-SO_3. The most probable structure for P_2O_5 is a dimer mol., P_4O_{10}, in the form of a tetrahedron built up by joining 4 tetrahedrons (each consisting of 1 P and 4 O atoms) at the vertices so that each tetrahedron is joined at 3 vertices with one vertex of each of the other 3 tetrahedrons. This formula explains the case with which P_2O_5 is oxidized to P_2O_5 (cf. *C.A.* 38, 6231[1]) and the obscure complexities involved in the stepwise reaction of P_2O_5 with H_2O. J. W. Perry

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